



Profile of the Federal Home Loan Bank System
December 31, 2001

Office of Policy, Research, and Analysis

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Section I: Financial and Membership Summary

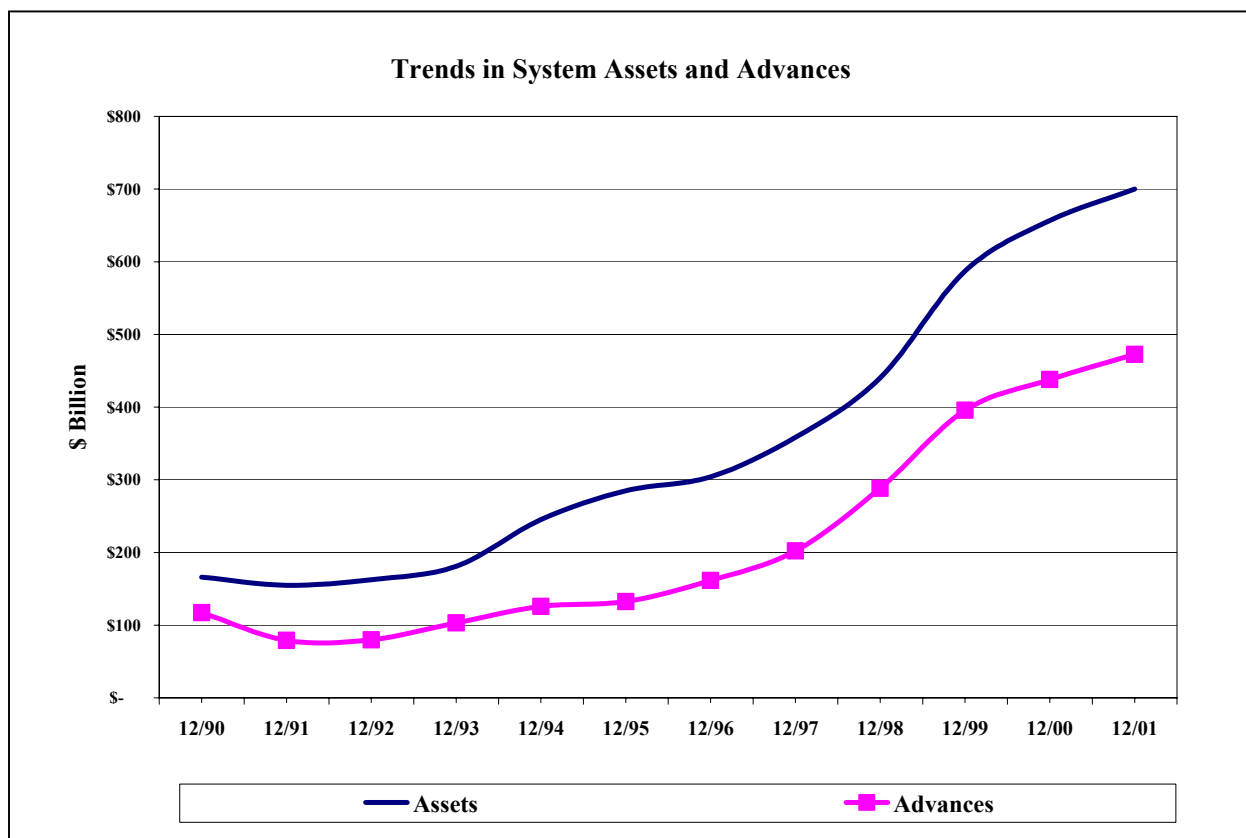
Section II: Affordable Housing Program

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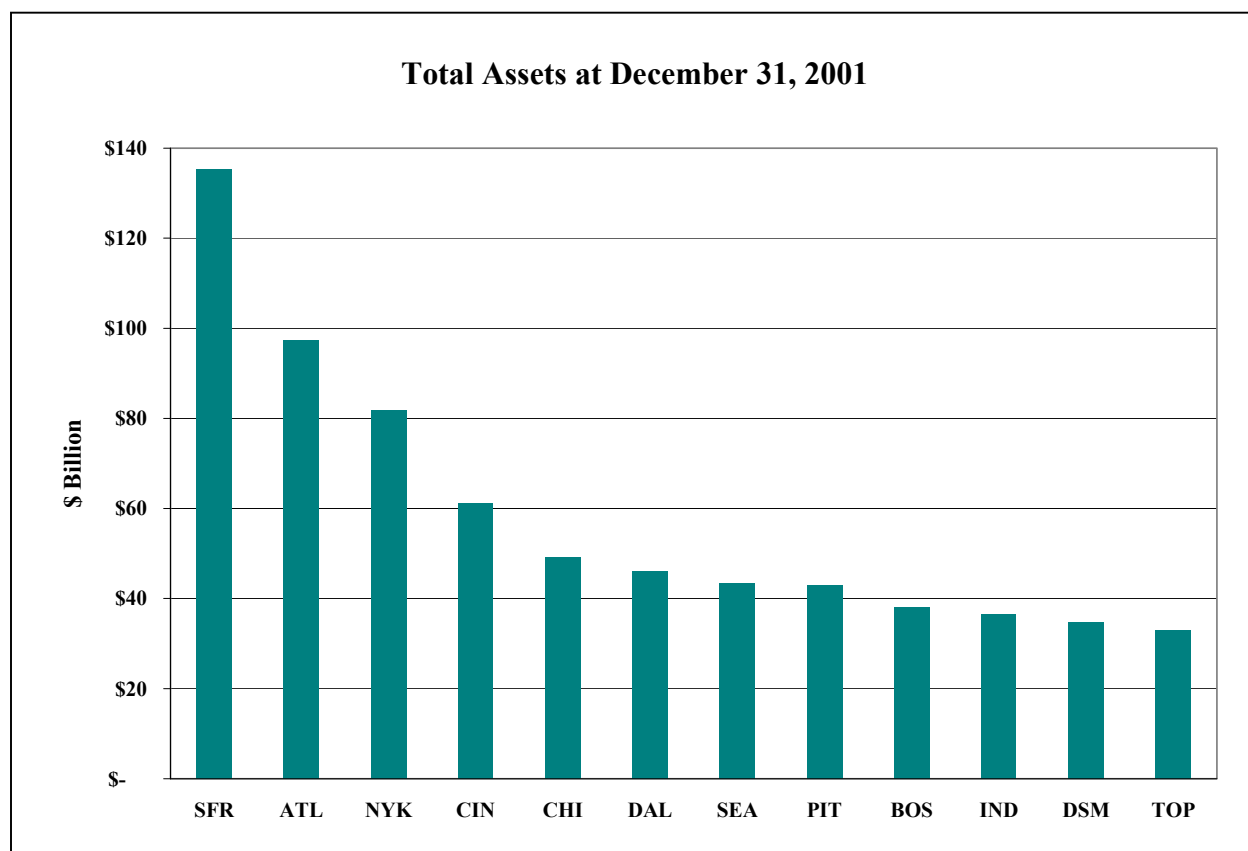
Section I

Financial and Membership Summary



At December 31, 2001, the assets of the Federal Home Loan Banks (FHLBanks) were \$700 billion. This represents an increase of 6.6 percent since December 31, 2000. In 2001, assets increased at seven of the FHLBanks and decreased at the other five FHLBanks. Driven by increases in advances, mortgage loans, and investments, assets increased by 39 percent at the FHLBank of Chicago. Assets increased by 23.5 percent at the FHLBank of Topeka and 20.8 percent at the FHLBank of Atlanta, driven by increases in advances in both cases. Declines in investments led to asset shrinkage at the FHLBanks of Boston and Pittsburgh, while declines in advances led to asset shrinkage at the FHLBanks of San Francisco and Seattle.

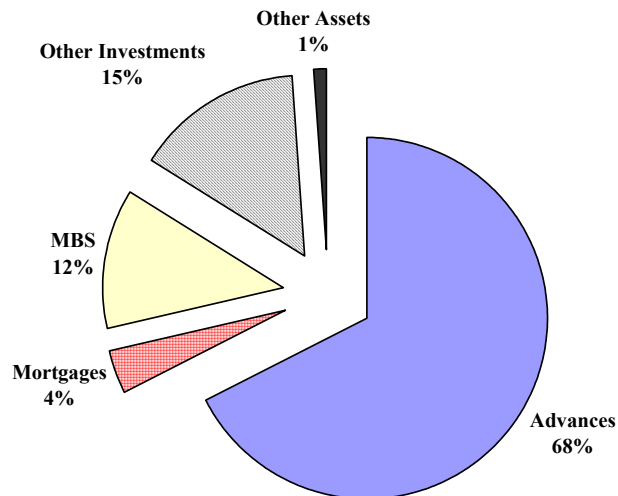
Advances increased by 8 percent to \$473 billion. A broadly distributed increase in advances to large and small members led to an increase in advances at the FHLBank of Topeka of 30 percent. Reflecting increases in advances of \$3 billion each to BB&T and SunTrust Bank, Atlanta's advances increased by 23.6 percent. Advances increased by 19 percent at the FHLBank of Chicago. Advances of \$2 billion to a new member, American National Bank and Trust Company of Chicago, accounted for most of this increase. The FHLBanks of Seattle and San Francisco experienced drops in advances of more than 7 percent. Reduced advances to Washington Mutual Bank, Washington Mutual Bank FA, California Federal Bank, and World Savings are the reason for most of these declines.



The four largest FHLBanks remain San Francisco, Atlanta, New York, and Cincinnati. In 2001, all the other FHLBanks except Topeka changed ranking as the FHLBanks exhibited a considerable disparity in growth rates. Most notable is the move of the FHLBank of Chicago from tenth to fifth place caused by double-digit increases in advances and investments, and a near doubling of mortgage loans. In contrast, the FHLBank of Des Moines experienced declines in both advances and investments and fell two places to eleventh place. Driven by a 28 percent reduction in investments (mostly fed funds), the FHLBank of Pittsburgh fell two places to eighth.

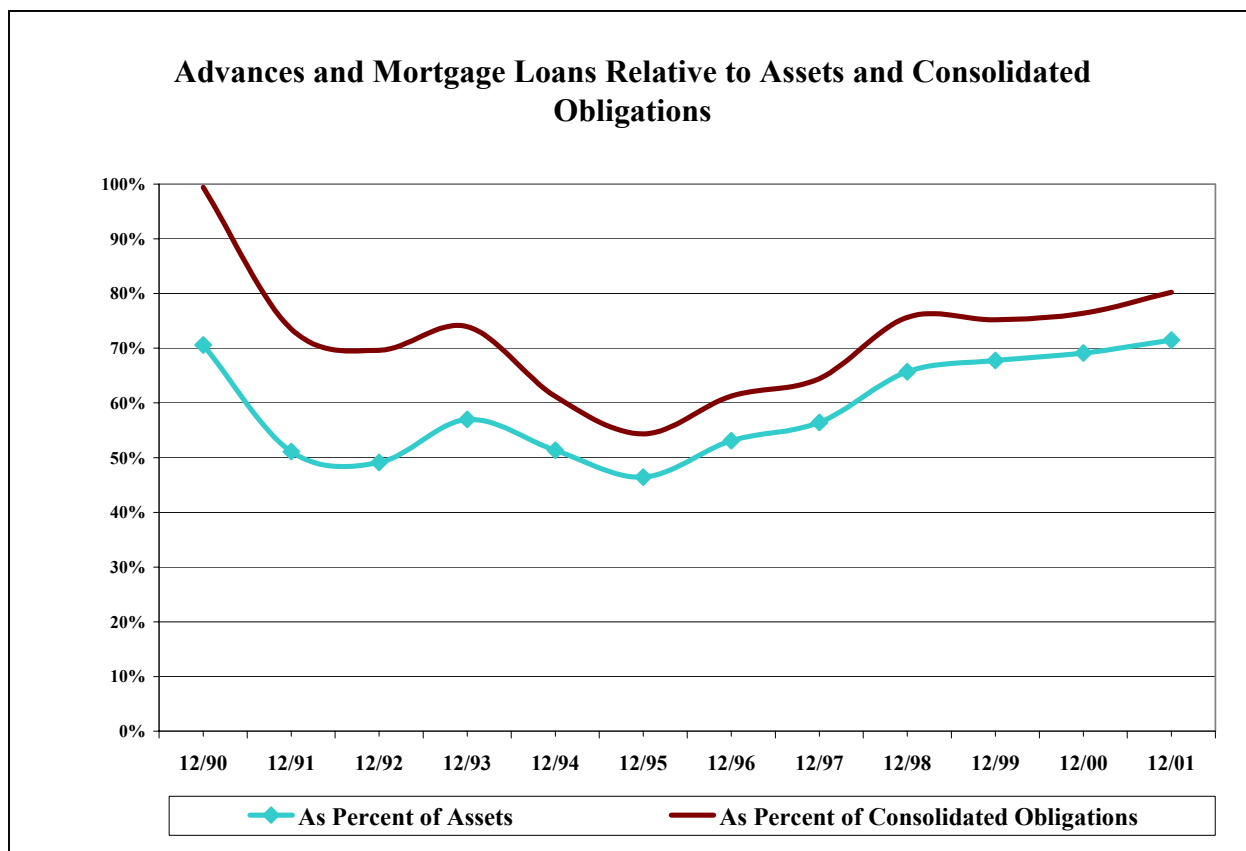
If the FHLBank System were a holding company, its assets would be behind that of Citigroup and J. P. Morgan Chase & Co., but ahead of Bank of America, making it the third largest domestic banking organization.

Asset Composition at December 31, 2001



Advances are 68 percent of assets. This compares with 67 percent of assets at the end of 2000. Mortgage loans increased to 3.9 percent of assets from 2.5 percent, and non-MBS investments fell to 15 percent of assets from 16.5 percent.

Advances as a percent of assets range from a high of 76 percent at the FHLBank of San Francisco to a low of 45 percent at the FHLBank of Chicago and 58 percent at the FHLBank of Cincinnati. The mortgage loans held by the FHLBank of Chicago account for 34 percent of its assets. Thus, advances plus mortgage loans as a percent of assets range from 78 percent at the FHLBank of Chicago and 76 percent at the FHLBank of San Francisco to 58 percent at the FHLBank of Cincinnati and 60 percent at the FHLBank of Seattle.

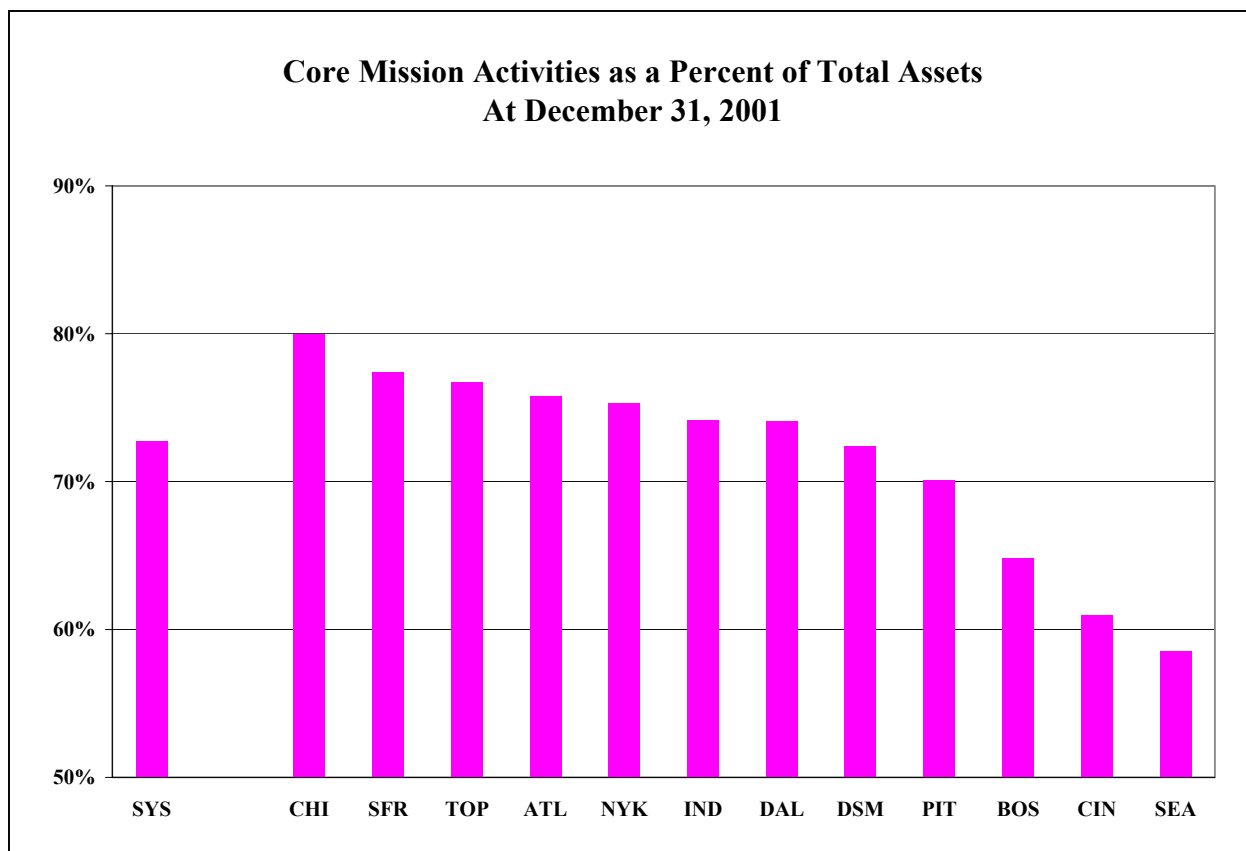


The sum of advances and mortgage loans serves as a historical proxy for mission assets since the Finance Board only began collecting specific detailed data on core mission assets in January 2001.

At December 31, 2001, advances and mortgage loans were 71.5 percent of assets. This compares with 69.1 percent of assets at the end of 2000 and 67.8 percent of assets at the end of 1999. As noted earlier, advances and mortgage loans range from 78 percent at the FHLBank of Chicago to 58 percent at the FHLBank of Cincinnati. From a longer-term perspective, advances as a percent of assets are 1 percent higher now than at the end of 1990 but 25 percentage points greater than at the end of 1995.

Advances and mortgage loans are 80 percent of consolidated obligations, up nearly 4 percent over the past year. Going back through time, the gap between advances and mortgages as a percent of assets and advances and mortgage loans as a percent of consolidated obligations widens because deposits and capital formerly were more important in the funding mix.

Advances and mortgage loans are equivalent to 89 percent of consolidated obligations at the FHLBank of Chicago, but only 65 percent at the FHLBank of Cincinnati.

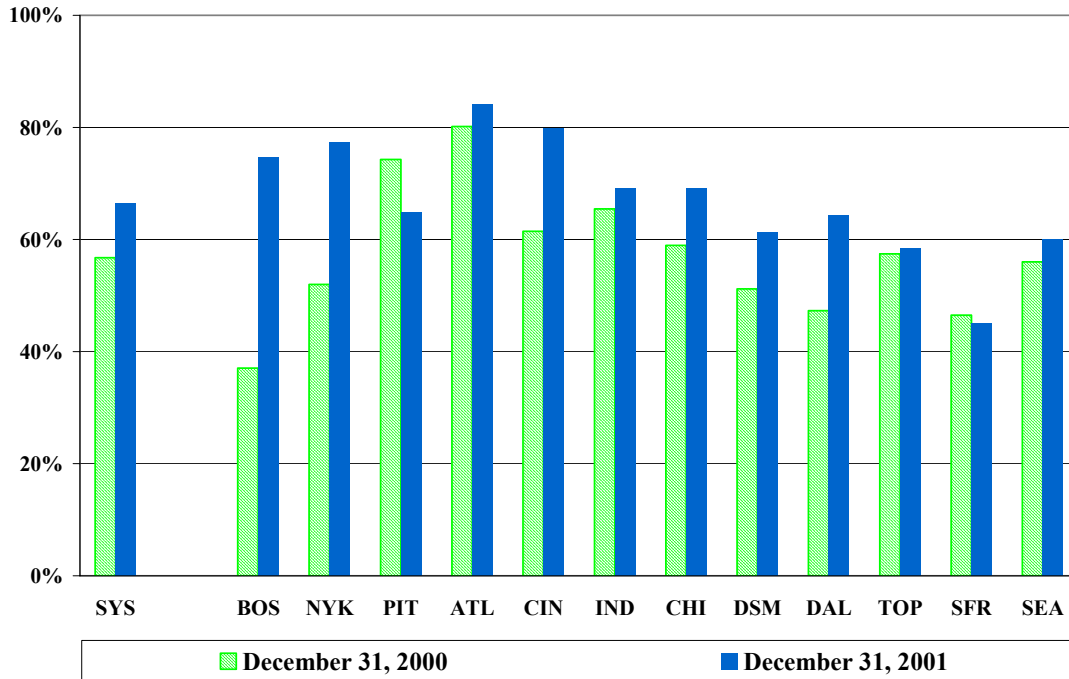


Federal Housing Finance Board regulations (12 CFR § 940.3) define core mission activities to include:

- ❑ Advances
- ❑ Acquired member assets, with some limitations
- ❑ Standby letters of credit
- ❑ Intermediary derivative contracts
- ❑ Certain debt or equity instruments with specific income or geographic targeting restrictions.

Core mission activities average 73 percent of assets for the FHLBank System. This is up from 72 percent of assets at June 30, 2001. Core mission activities range from 80 percent of assets at the FHLBank of Chicago, partially reflecting its mortgage holdings, to 59 percent of assets at the FHLBank of Seattle.

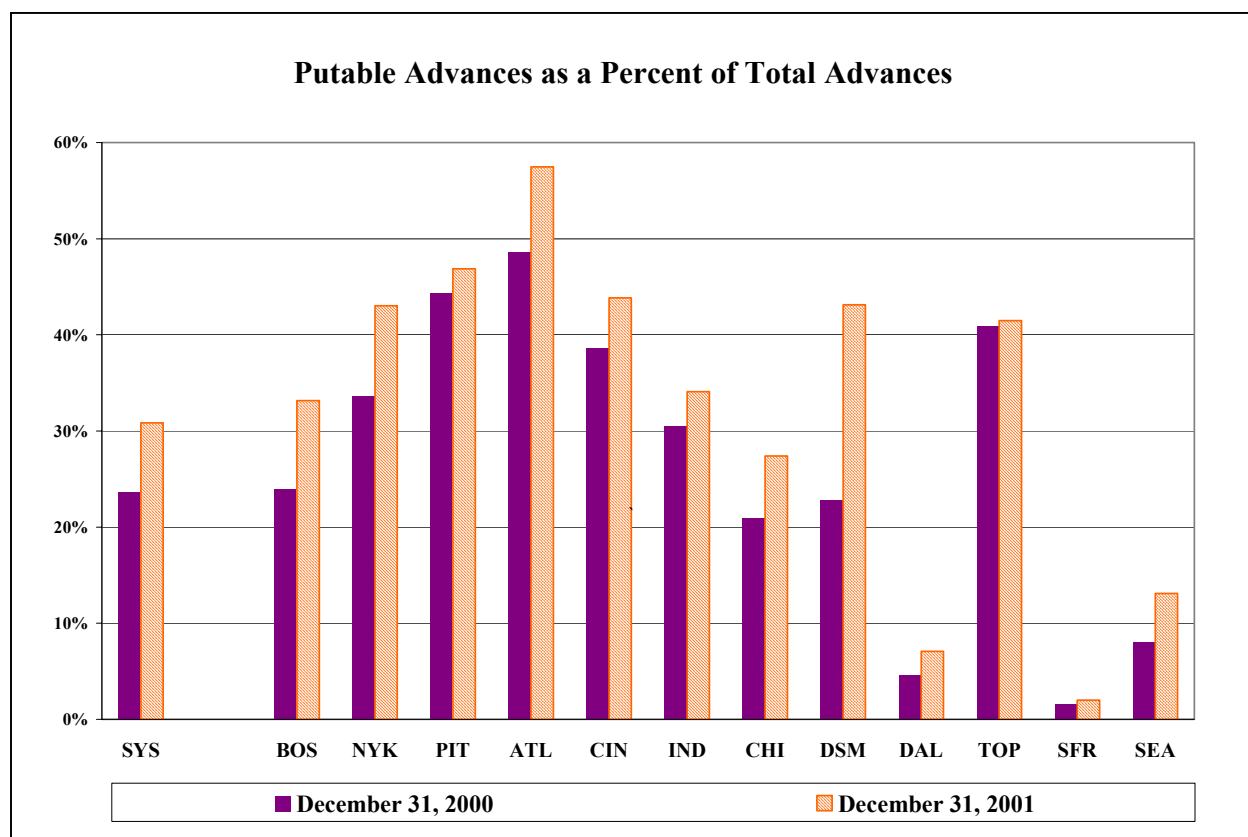
Long-Term Advances as a Percent of Total Advances



Long-term advances -- those with a remaining maturity of one year or longer -- were 67 percent of total advances at December 31, 2001. This compares with 57 percent of total advances at the end of 2000. The record-low interest rates of 2001 allowed members to lock-in relatively low rates on term funding.

Reflecting the demands of members, the range of long-term advances as a percent of total advances is from 84 percent at the FHLBank of Atlanta to 45 percent at the FHLBank of San Francisco.

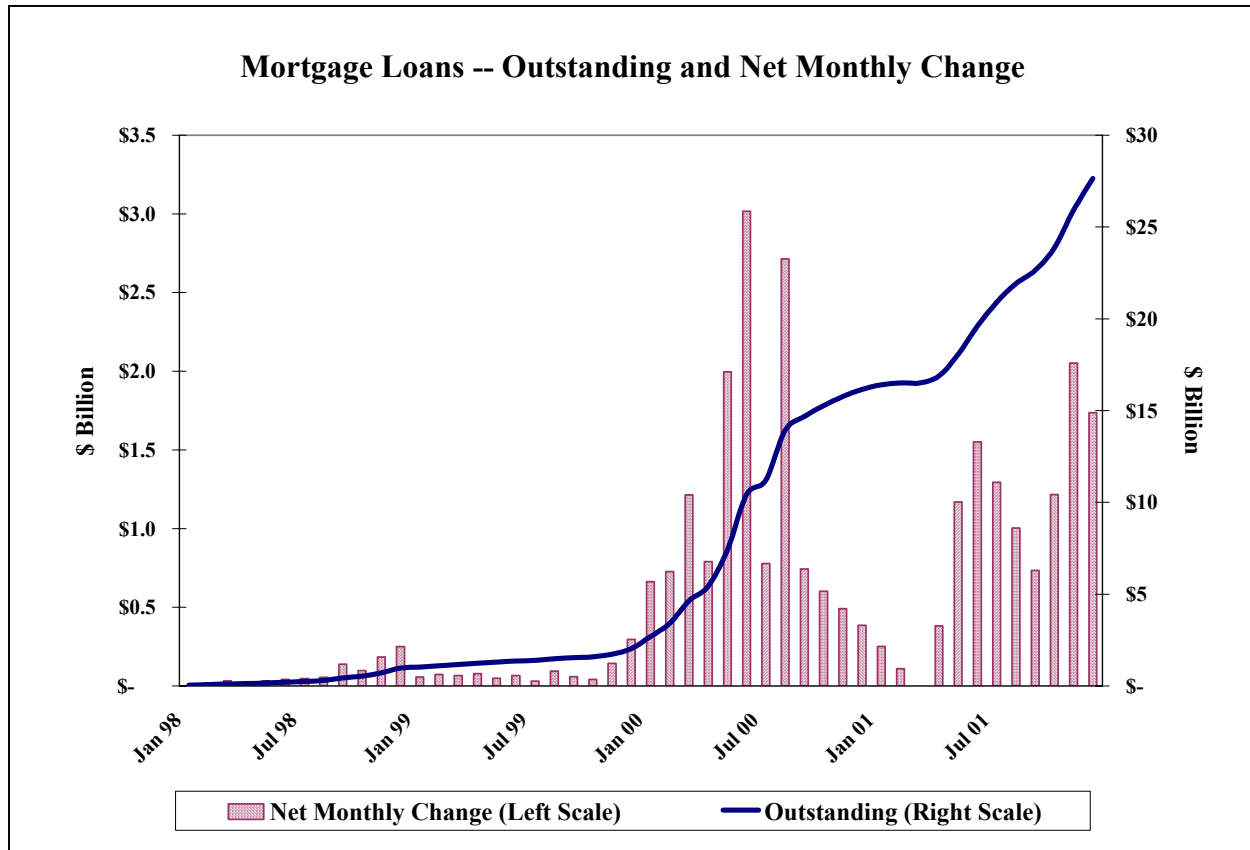
Long-term advances include many putable advances. If interest rates increase, an FHLBank could exercise its put option and convert the advance to a floating-rate advance or to a fixed-rate advance at a then-current interest rate. Accordingly, the actual portion of long-term advances is likely to be somewhat less than this data would indicate if interest rates increase.



With a putable or convertible advance, an FHLBank effectively purchases a put option from the borrowing member that allows the FHLBank either to convert the advance from fixed to floating rate if interest rates increase or to terminate the advance and offer replacement credit on new terms.¹ While such advances have proven popular with borrowers because of their lower, option-adjusted rate, the convertibility feature and consequent option risk raise the question of whether such an advance is suitable for all otherwise qualified borrowers. In particular, most members hold few, if any, assets whose interest-rate movements and embedded optionality are similar to those of a putable advance.

Putable advances increased from \$103 billion to \$146 billion in 2001, and now represent 31 percent of advances, up from 24 percent one year ago. As of December 31, 2001, the FHLBank of Atlanta continued to hold more putable advances than any other FHLBank, \$41 billion, which amounted to 58 percent of its total advances and 28 percent of System putable advances. As of this same date, putable advances were only 2 percent of the advances of the FHLBank of San Francisco.

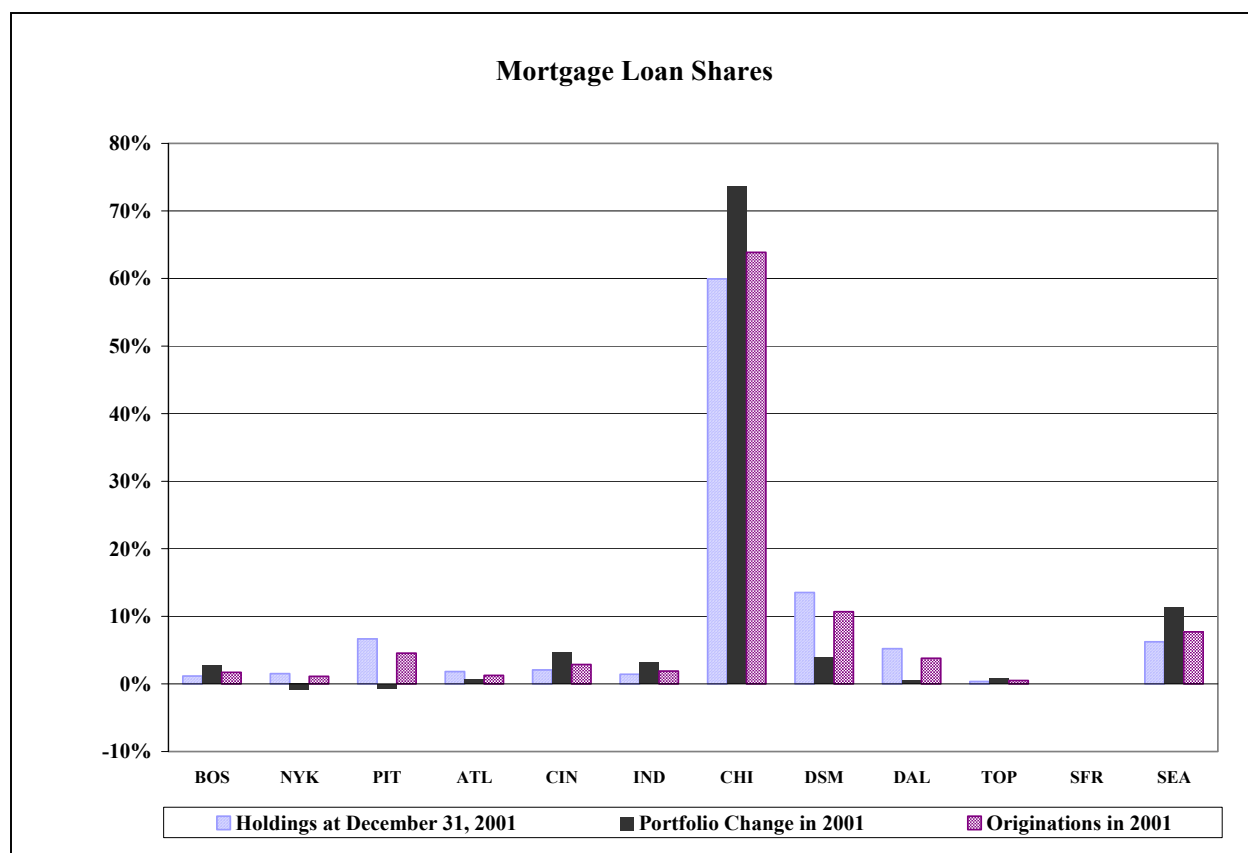
¹ Terminology is an issue. Some FHLBanks call this product a putable advance, and others call it a convertible advance. Some FHLBanks may call the product a "callable" advance. Callable is not the proper term because call options are exercised when interest rates go down. The FHLBank has purchased a put option that it can exercise when interest rates increase.



At December 31, 2001, mortgage loans outstanding were \$27.3 billion, compared with \$16.1 billion at December 31, 2000. Mortgage loans now account for 3.9 percent of FHLBank System assets.

The monthly pattern of net changes in mortgage loans has fluctuated considerably. The significant increases in the middle of 2000 consisted principally of FHA-insured and VA-guaranteed loans as pricing relationships in that market made selling loans to an FHLBank more profitable than selling them as Ginnie Mae pass-through securities.

The mortgage loan portfolios saw significant prepayment activity in 2001. To achieve a net increase of \$11.5 billion in mortgage loans outstanding, the FHLBanks originated \$19.5 billion of loans in 2001. Stated another way, against a mortgage loan balance of \$16.1 billion at the end 2000, repayments and prepayments in 2001 were \$8.0 billion resulting in a prepayment rate of nearly 50 percent. Lower mortgage rates led to the surge in prepayment activity.

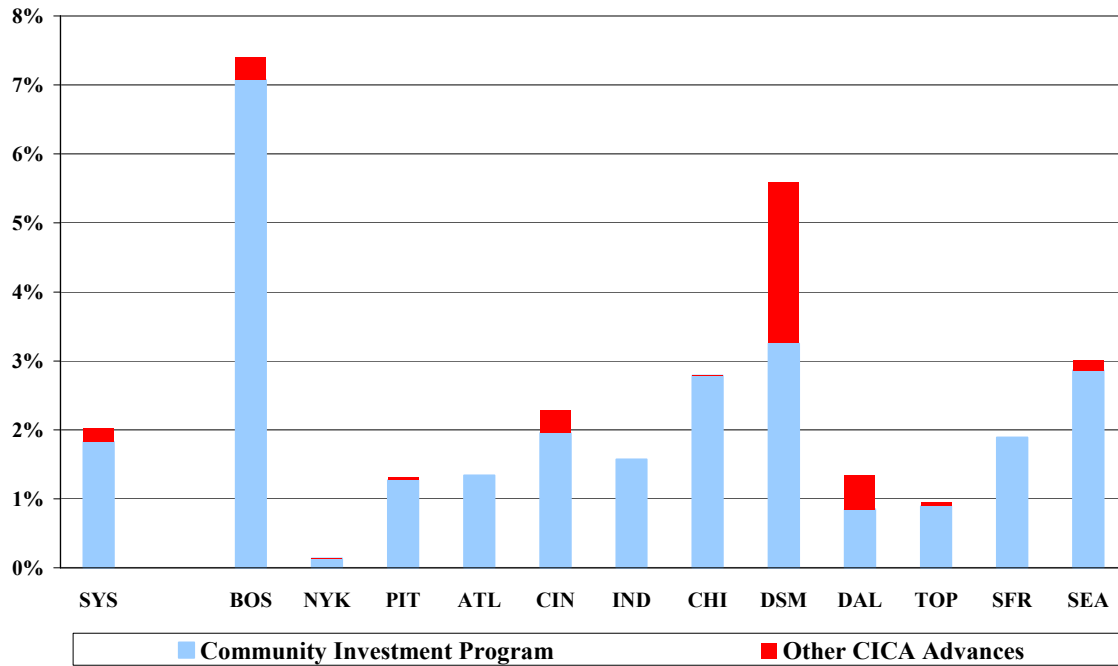


By any measure, the FHLBank of Chicago dominates the mortgage loan programs of the FHLBanks. At December 31, 2001, the FHLBank of Chicago held mortgage loans of \$16.6 billion or 60 percent of the System total. In addition, the Chicago FHLBank represents 74 percent of the System's net increase in mortgage holdings in 2001 and 64 percent of mortgage originations.

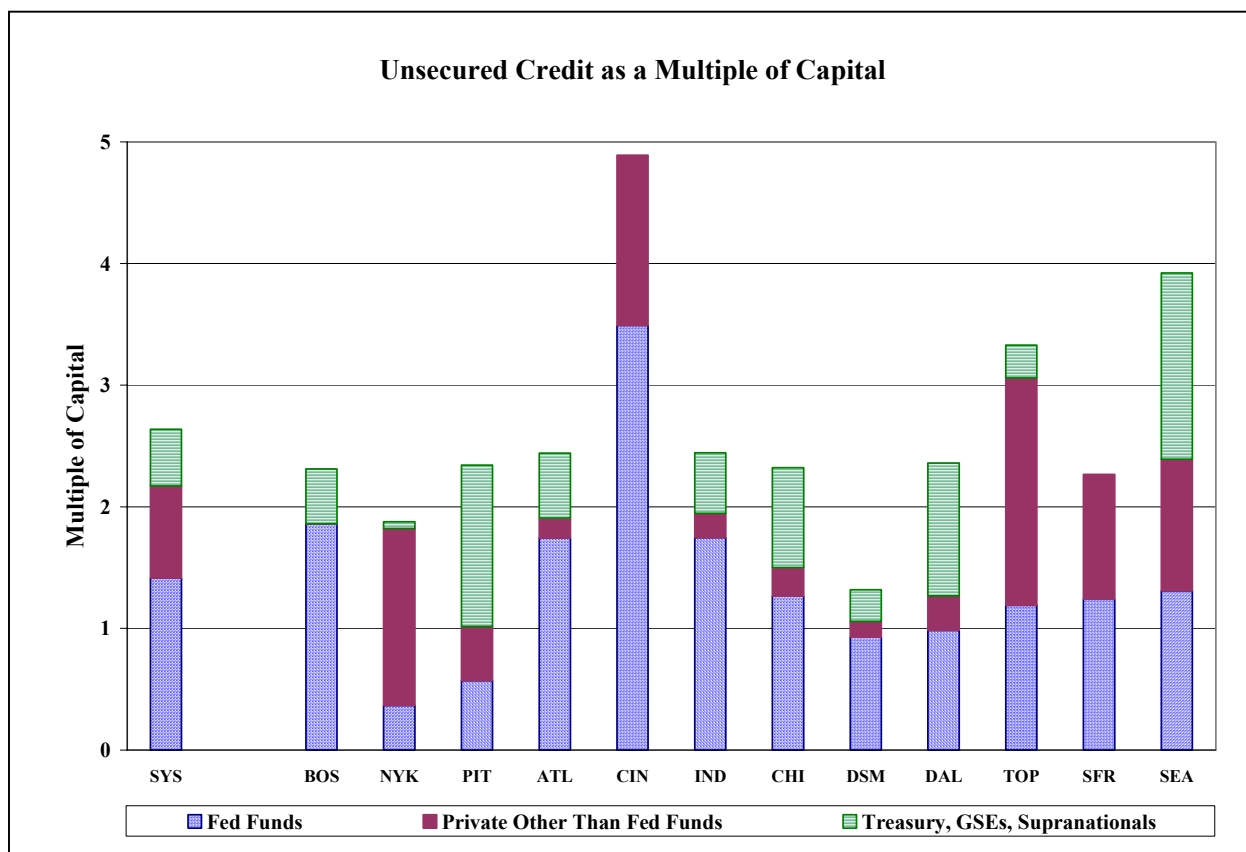
To place the FHLBanks' mortgage activity in a larger context, the increase in 2001 in mortgage and mortgage-backed securities holdings of Fannie Mae was \$98 billion and \$106 billion for Freddie Mac. The increase for the FHLBanks was \$17 billion, of which \$5 billion were MBS and \$12 billion were mortgage loans. The FHLBanks' share of the net increase in mortgages and MBS of the three housing government-sponsored enterprises (GSEs) was 7.7 percent.

In 2001, mortgage acquisitions by Fannie Mae were \$615 billion, and mortgage acquisitions by Freddie Mac were \$475 billion. Gross mortgage acquisitions by the FHLBanks were \$19.5 billion, which is a 1.7 percent share.

**Community Investment Cash Advances
As a Percent of Total Advances Outstanding at December 31, 2001**



At December 31, 2001, the FHLBanks reported total Community Investment Cash Advances (CICA) of \$9.5 billion. Of this total, \$8.6 billion were Community Investment Program (CIP) advances and \$0.9 billion were non-CIP CICA advances. CICA advances amount to 2 percent of total advances.



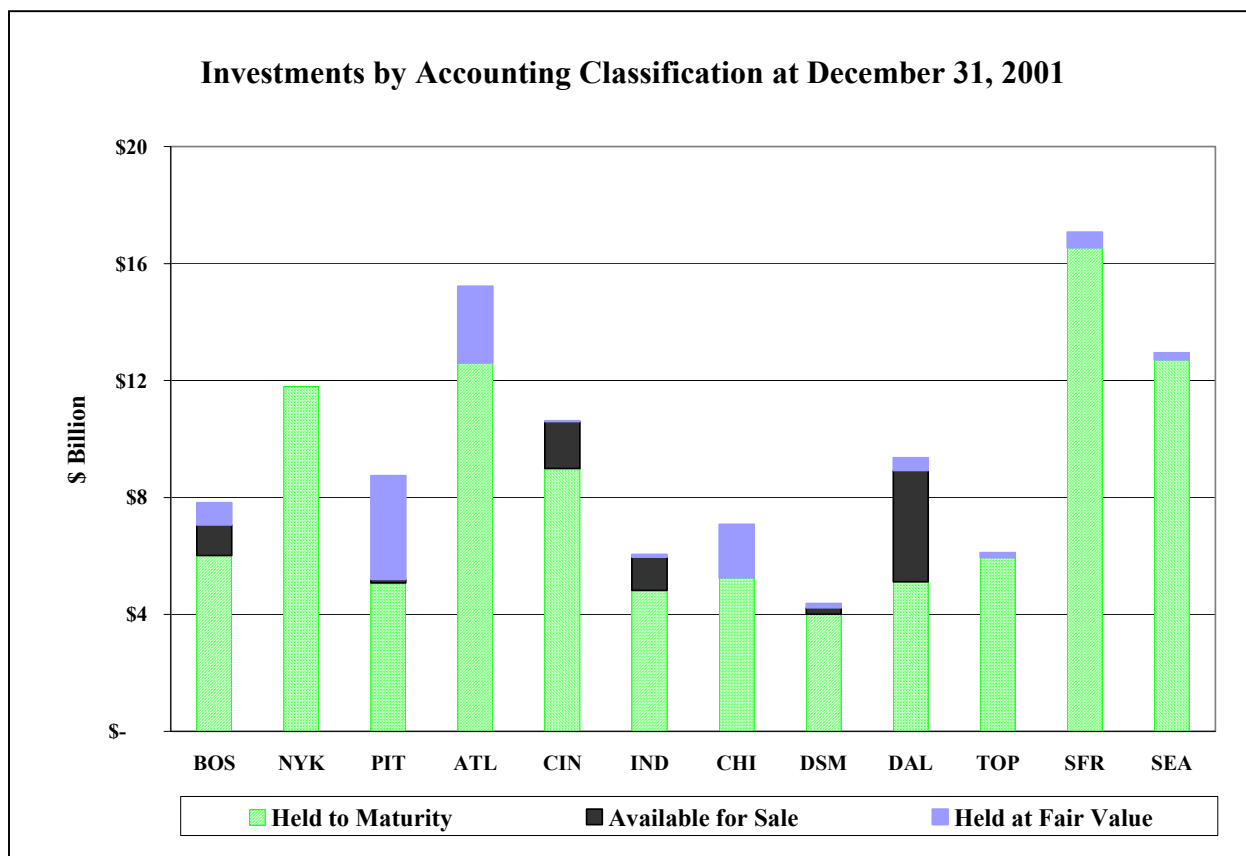
At December 31, 2001, the FHLBanks had unsecured credit exposure of \$90.2 billion. Of this, \$48.4 billion were federal funds sold. The “Private Other Than Fed Funds” category consists principally of \$19.1 billion of interest-bearing deposits in banks and \$6.7 billion of commercial paper. The FHLBanks had \$15.9 billion of unsecured credit to the Treasury, GSEs, and supranationals (*e.g.*, World Bank), including \$7 billion to Freddie Mac and \$5 billion to Fannie Mae. Aggregate private exposure is 2.17 times System capital, but the unsecured private credit exposure of the FHLBank of Cincinnati is nearly 5 times its capital.

Counterparties with at least \$2 billion of credit outstanding at December 31, 2001 were:

American Express Company
 Canadian Imperial Bank of Commerce
 M&T Bank Corporation*
 Southtrust Corporation*
 Washington Mutual, Inc.*

Bank of Nova Scotia
 J.P. Morgan Chase & Company*
 Royal Bank of Scotland
 UBS AG
 Wells Fargo & Company*

* Holding companies with a member affiliate.

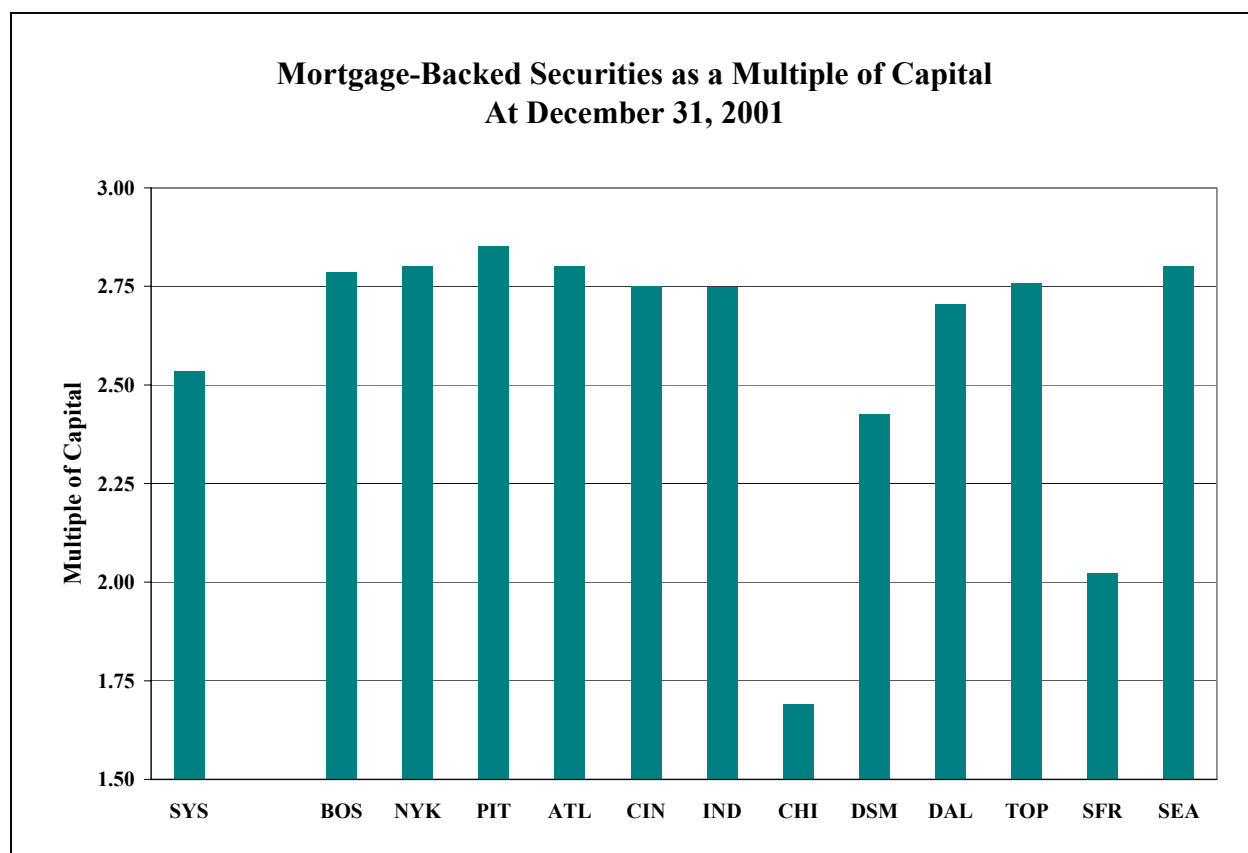


At December 31, 2001, the FHLBanks held investments of \$193 billion. This total includes \$19 billion of interest-bearing deposits in banks, \$8 billion of securities purchased under resale agreements (repos), \$99 billion of held-to-maturity securities, \$8 billion of available-for-sale securities, \$10.4 billion of securities held at fair value, and \$48.4 billion of federal funds sold. This total is \$3.3 billion greater than at December 31, 2000.

Investments average 27.5 percent of assets for the FHLBanks. Investments as a percent of assets range from 41 percent at FHLBank of Cincinnati to 21 percent at FHLBank of Chicago.

As part of their adoption and implementation of Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities," the FHLBanks transferred \$4.6 billion of securities from the held-to-maturity categorization to the available-for-sale categorization. They also transferred \$7.5 billion from the held-to-maturity categorization to the securities held at fair value categorization. The FHLBanks transferred these investments to get symmetric marking to market of the investment along with the associated derivative. An FHLBank can designate any newly acquired asset to any of the three accounting classifications.

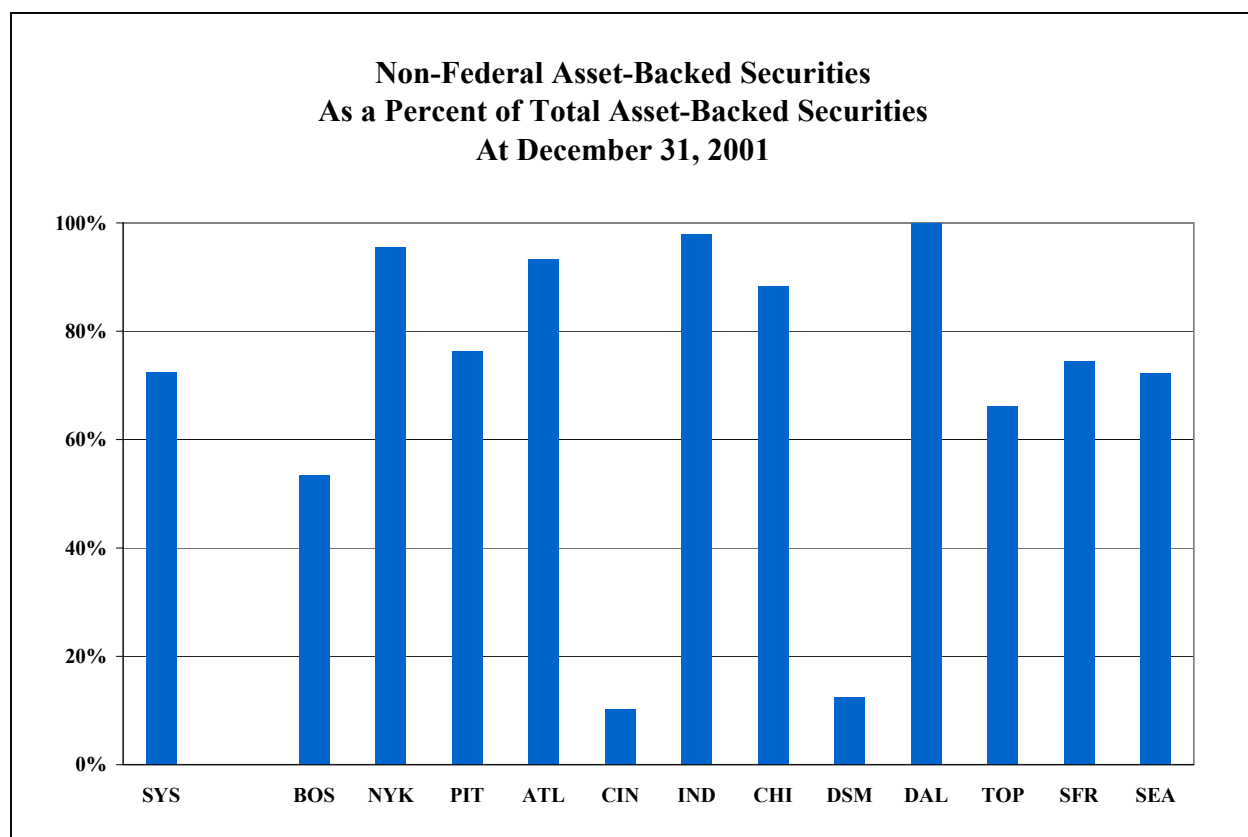
Held-to-maturity securities continue to dominate the investment portfolios of all the FHLBanks.



The Finance Board's Financial Management Policy (FMP) limits an FHLBank's purchase of mortgage-backed securities to no more than three times its capital. At December 31, 2001, aggregate MBS investments of the FHLBanks were 2.53 times capital, down from 2.60 one year earlier.

At December 31, 2001, the FHLBanks held MBS of \$86.7 billion. This is an increase of \$5.5 billion since the end of 2000. The increase is less than proportional to the increase in capital. MBS holdings range from \$13.8 billion at the FHLBank of San Francisco to \$3.8 billion at the FHLBank of Des Moines.

The FHLBank of San Francisco, as a matter of policy, has long held MBS well under the regulatory limit. However, it increased its holdings of MBS by nearly 28 percent in 2001. The FHLBank of Chicago has the lowest multiple of MBS to capital. Because of its mortgage assets in portfolio and the expected growth in mortgage assets, the Chicago FHLBank has significant mortgage convexity to manage without adding to this by the purchase of additional MBS.



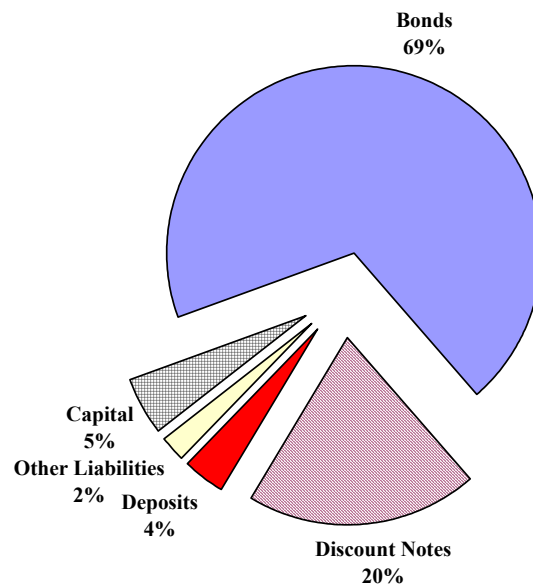
Section II.B of the Finance Board’s FMP authorizes the FHLBanks to purchase asset-backed securities. Section II.B.8 authorizes the purchase of securities issued or guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae, including collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs) backed by such collateral. Section II.B.9 authorizes the purchase of other triple-A-rated MBS, CMOs, and REMICs. Finally, Section II.B.10 authorizes the purchase of triple-A-rated, asset-backed securities collateralized by manufactured housing loans or home equity loans.

At December 31, 2001, 72 percent of the asset-backed securities held by the FHLBanks were “private label,” up from 65 percent at June 30, 2001. Included in the private label designation are MBS not issued or guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae, as well as CMOs or REMICs not backed by such collateral.

Non-federally related MBS typically are pools of non-conforming or jumbo mortgages and trade in thinner markets than federally related MBS. In addition, there is less pool diversification and greater uncertainty about the prepayment speeds on non-federally related MBS than for federally related MBS. Both of these features make the required yield higher on private-label MBS than on otherwise similar federally related MBS.

The FHLBanks hold an estimated 12 percent of all private-label MBS. These holdings raise mission issues because only a small proportion of the mortgages underlying these MBS are below the conforming loan limit.

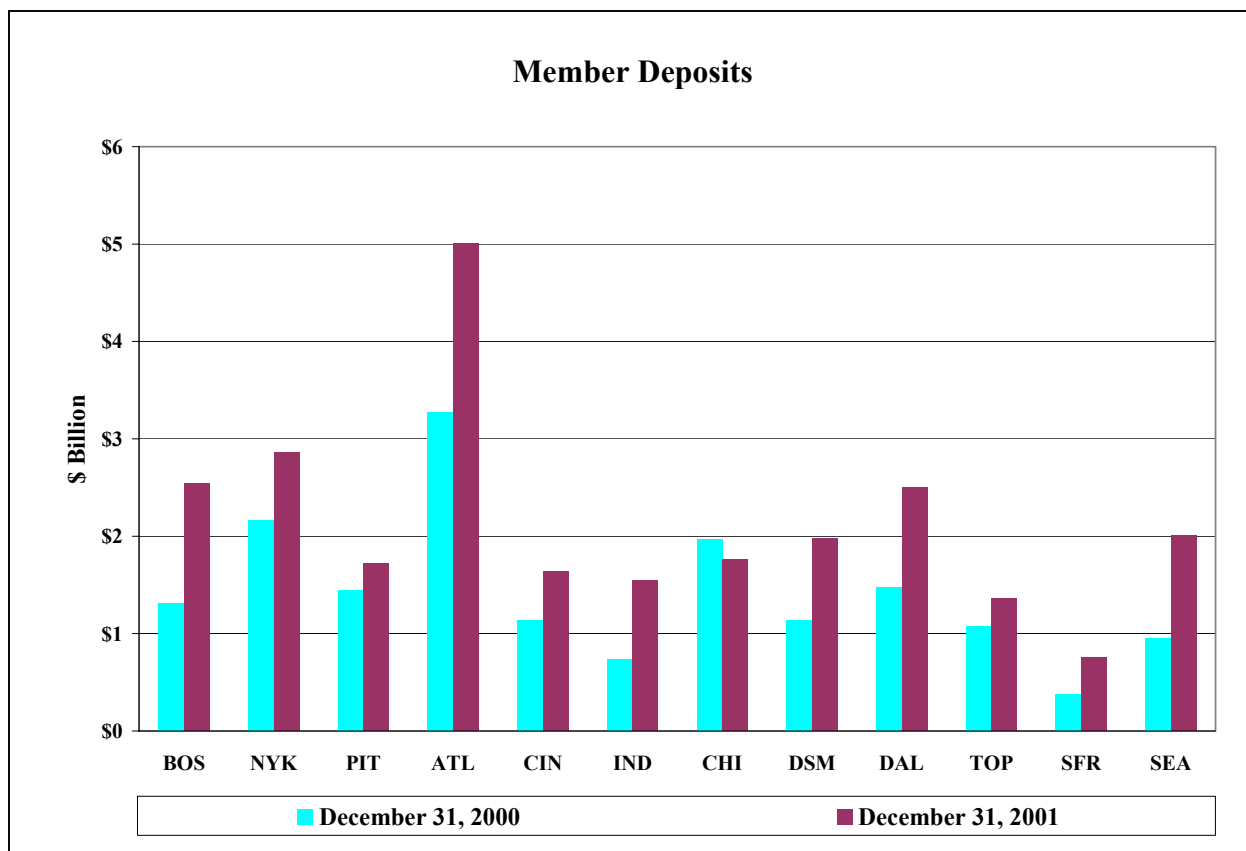
Liability Composition and Capital at December 31, 2001



At December 31, 2001, bonds were 69 percent of the total funding of the FHLBanks, discount notes were 20 percent, deposits were 4 percent, and capital was 5 percent.

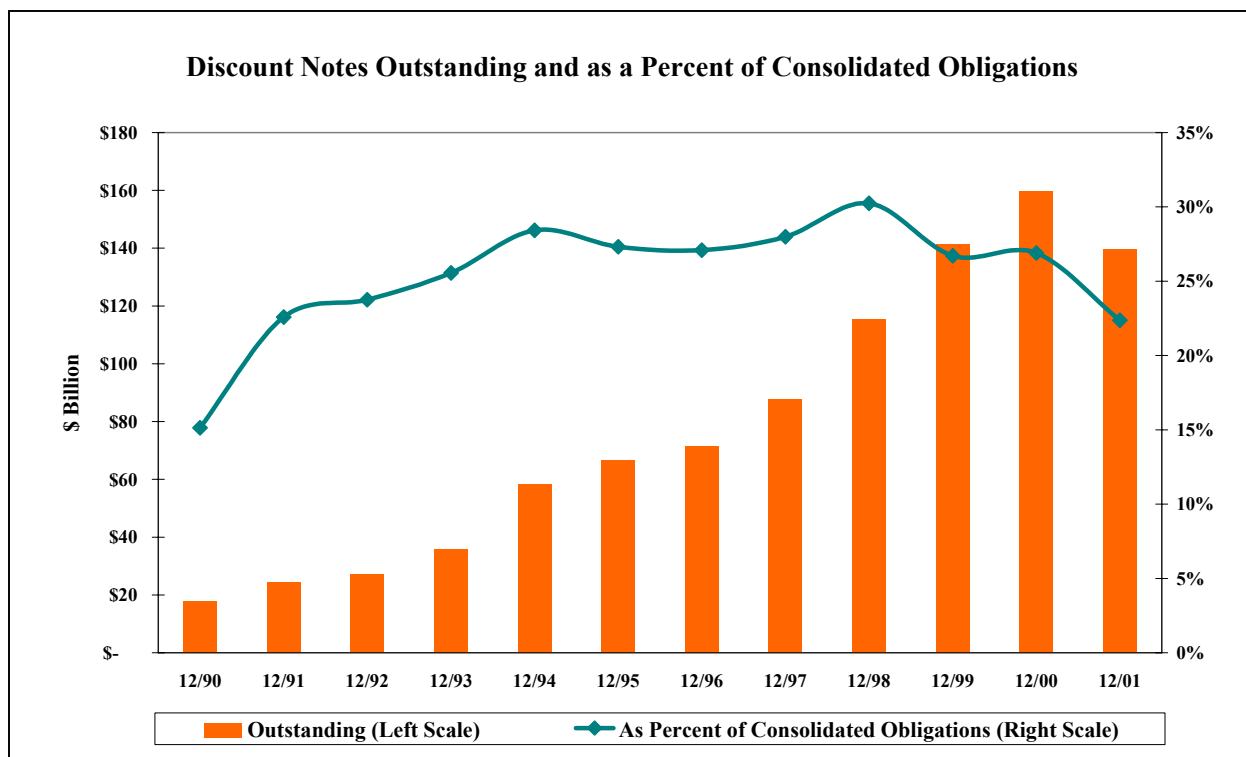
Since the end of 2000, there have been two trends in the liability composition. First, there was some substitution of discount notes for bonds. During the first half of 2001, the FHLBanks called \$131 billion of bonds. In this environment, the FHLBanks and both Fannie Mae and Freddie Mac were attempting to sell enormous amounts of debt. Bond market investor demand was not initially as great as the supply of new bonds, and, therefore, called bonds were not fully replaced with newly issued bonds. On the supply side, some FHLBanks were reluctant to issue more callable bonds as callable spreads versus LIBOR deteriorated to minus 20 basis points.

Second, as 2001 progressed, markets accommodated a gradual substitution of bonds for discount notes. In the second half of 2001, bonds increased to 69 percent of total liabilities from 63 percent, while discount notes declined to 20 percent of total liabilities from 26 percent. While the funding levels on swapped callable bonds did not improve from the LIBOR-20 basis point range, discount note funding became less attractive than swapped callable bond funding on a sub-LIBOR basis with spreads in the mid-teens.



Total member deposits increased by \$8.7 billion or 51 percent in 2001, with all FHLBanks except Chicago recording deposit increases. Deposits doubled at the FHLBanks of Indianapolis, San Francisco, and Seattle.

The member deposit growth is consistent with anecdotal evidence of individual investors withdrawing funds from equity markets and placing the funds in insured depository institutions. As banks and thrifts experienced a liquidity bulge early in 2001, they deposited some of their excess liquidity in their respective FHLBank. Another, and perhaps more important, result of the liquidity bulge has been a reduction in the demand for advances.

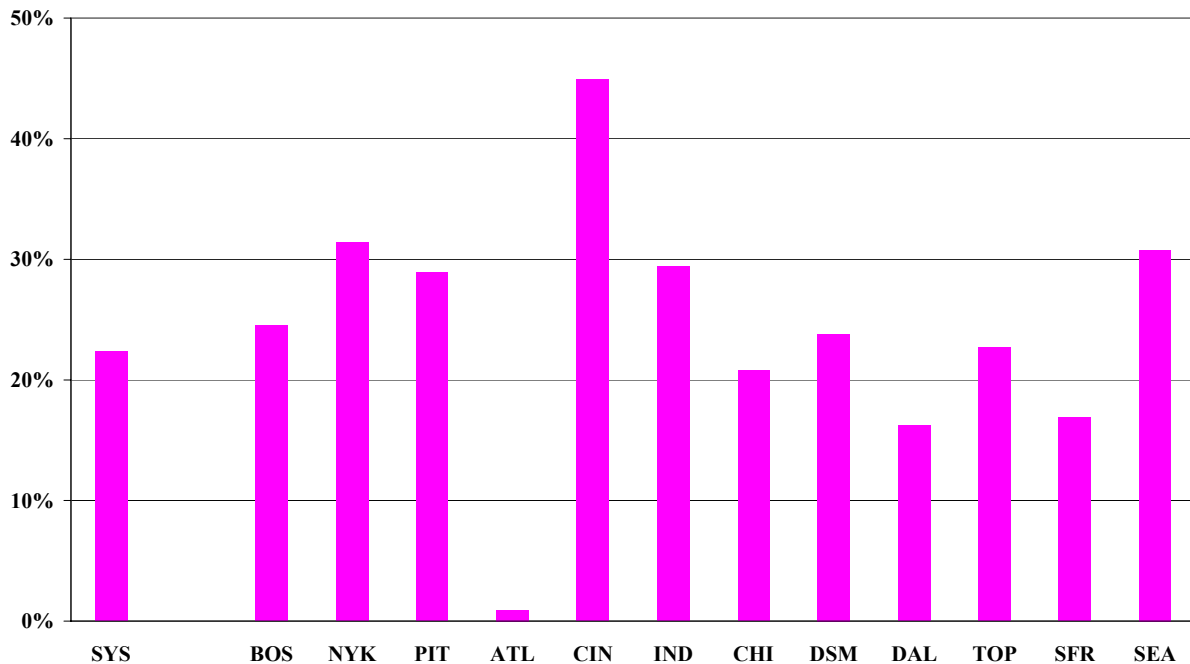


In 2001, discount notes fell both in absolute terms (by \$20.4 billion) and as a percent of consolidated obligations (by 4.5 percent). At December 31, 2001, discount notes totaled \$139.5 billion or 22.4 percent of consolidated obligations.

Overnight discount notes outstanding range between \$10 billion and \$20 billion. The daily rolling over of this position plus the sales of term discount notes resulted in total discount note sales of more than \$4.6 trillion in 2001.

The annual data obscure the trend of discount notes outstanding in 2001, as discount notes outstanding peaked at more than \$185 billion at the end of April. Discount notes outstanding gradually declined throughout the remainder of 2001, including a \$16 billion decline in December. As noted earlier, the reduction in discount notes reflects reduced “indigestion” in the bond market and unfavorable discount note pricing.

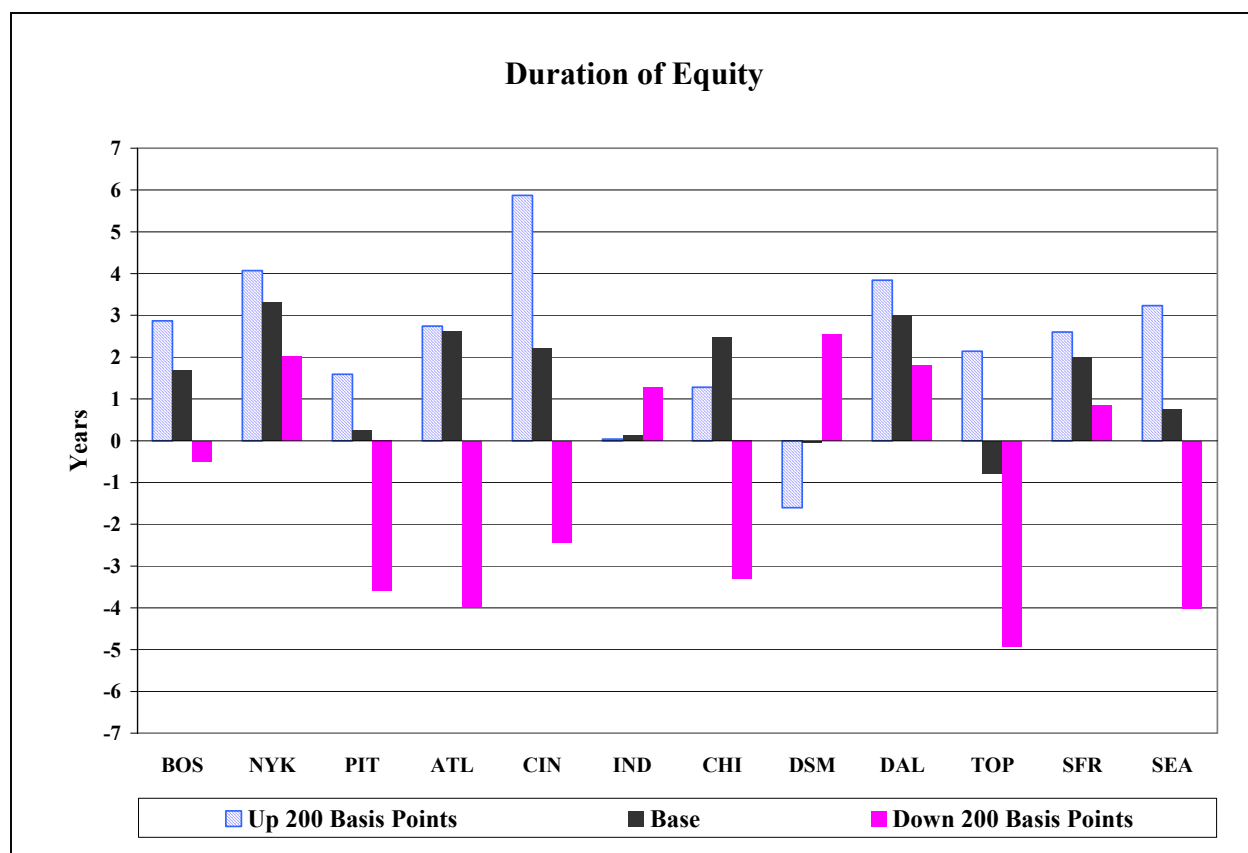
**Discount Notes as a Percent of Total Consolidated Obligations
At December 31, 2001**



At December 31, 2001, discount notes amounted to 22.4 percent of consolidated obligations. The relative use of discount notes varies considerably among the FHLBanks, ranging from 1 percent at the FHLBank of Atlanta to almost 45 percent at the FHLBank of Cincinnati. The FHLBank of Atlanta has largely abandoned discount-note financing as it gets better execution by issuing and swapping bonds to create synthetic short-term liabilities.

Each Tuesday and Thursday, the Office of Finance auctions discount notes for the FHLBanks. One of the standard maturities in these semi-weekly auctions is four weeks. In mid-2001, the Treasury Department implemented the weekly auction of new four-week Treasury bills that will occur each Tuesday (through the reopening of previously issued bills with four weeks to maturity). The Treasury Department has implemented this procedure to reduce its reliance on “cash management bills” that it formerly auctioned from time to time as needed.

The four-week bill has essentially put a floor on the rate on discount notes. Before the introduction of the four-week bill, the Office of Finance could occasionally sell four-week discount notes in volume below the four-week maturity point on the Treasury yield curve. The four-week bill adds a degree of competition in that market segment.

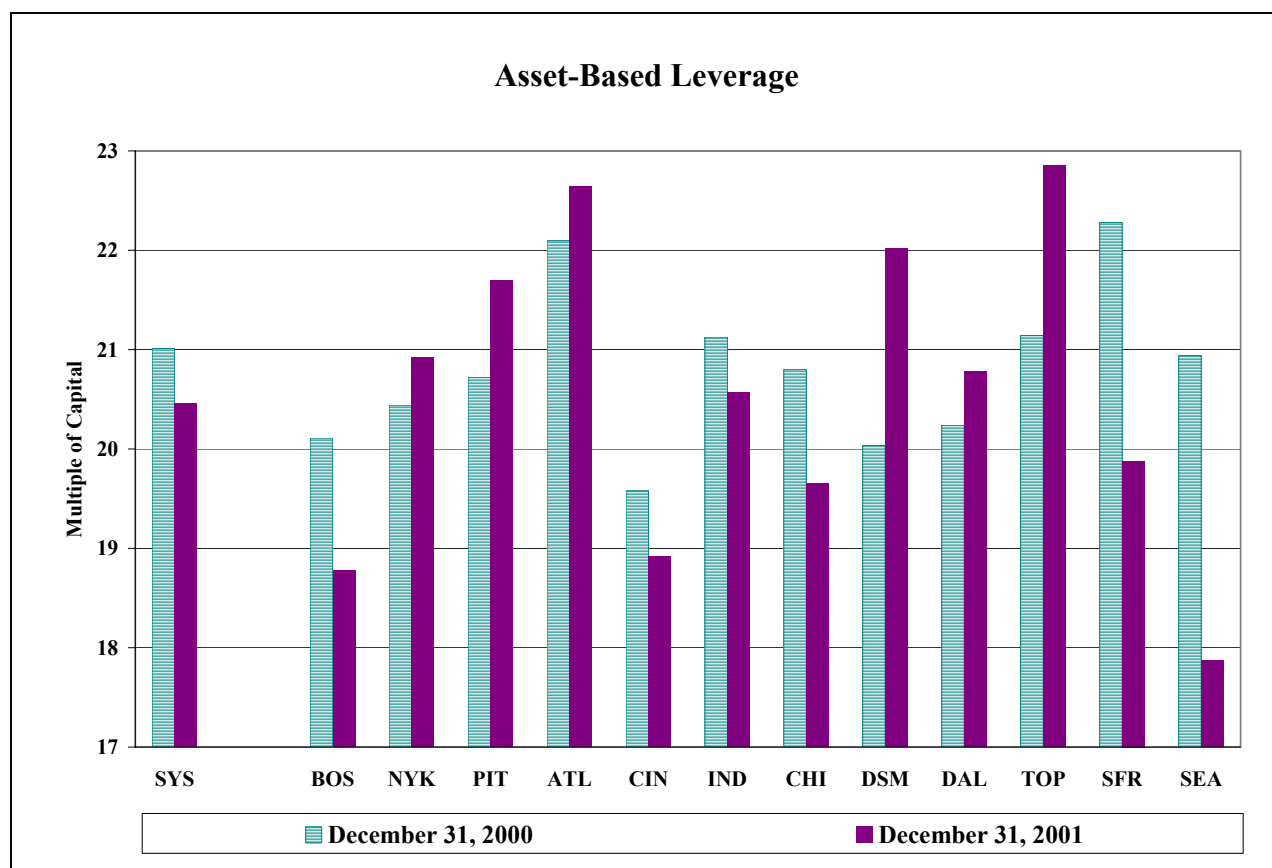


The Finance Board's FMP requires that each FHLBank's duration of equity (DOE), at current interest rate levels using the consolidated obligation cost curve or other appropriate discounting methodology, be maintained within a range of +/- 5 years. Each FHLBank must maintain its DOE, under an assumed instantaneous 200 basis points shift in interest rates, within a range of +/- 7 years. Each FHLBank has internal modeling systems for measuring DOE. In determining compliance with the FMP's DOE limits, the Finance Board does not allow FHLBanks to include Affordable Housing Program (AHP) or Resolution Funding Corporation (REFCORP) obligations in their respective interest-rate risk compliance calculations.

With positive DOE, liabilities in general reprice more quickly than assets. This quick repricing is beneficial in a time of falling interest rates. It allows the Banks to issue debt at lower rates and results in increased net interest income. The converse is true in a time of rising interest rates.

No FHLBank is close to the five-year limit for the base case. Only the FHLBank of Cincinnati has a duration in excess of 5 years in the up 200 basis points shock case.

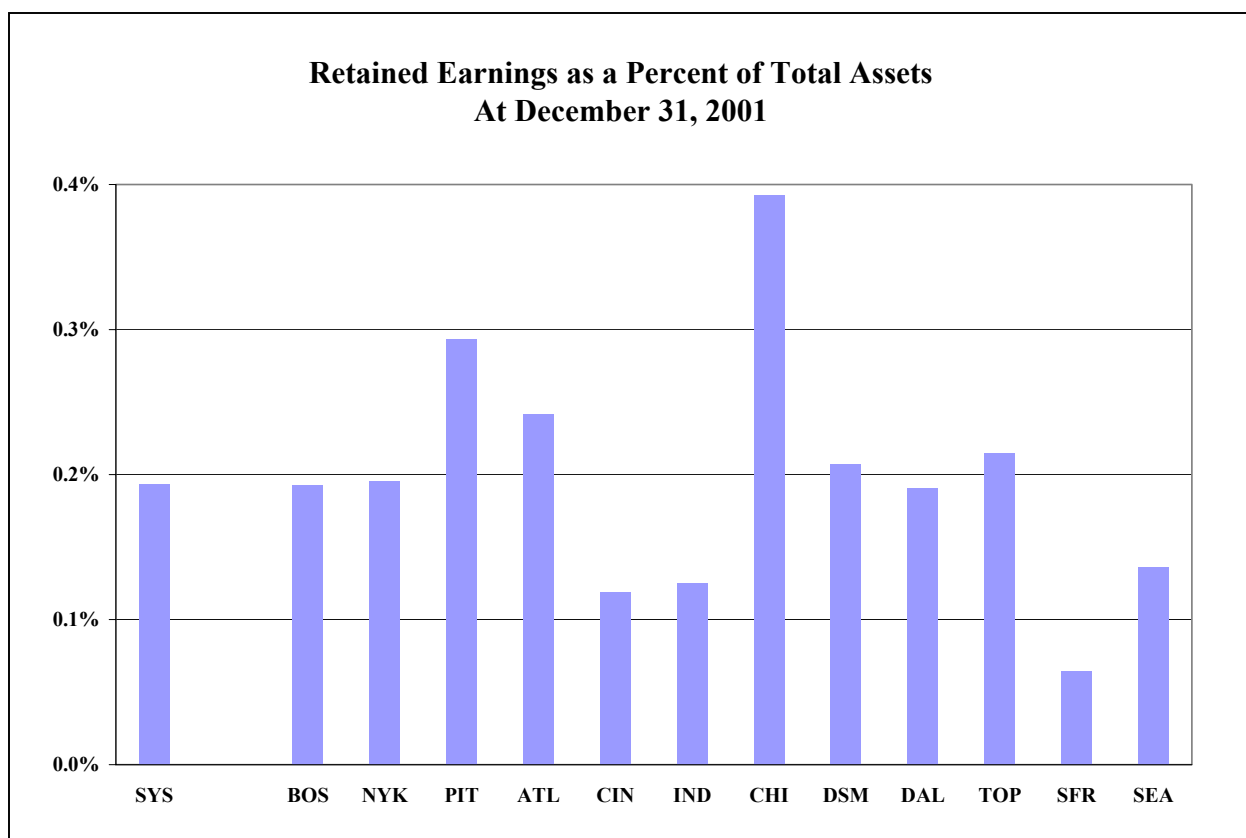
After an FHLBank implements its capital plan, model-based market-risk capital charges will replace the prescriptive duration of equity as the principal means of limiting its interest-rate risk.



At December 31, 2001, the assets of the FHLBanks were 20.45 times their capital, down from 21.01 times capital at the end of 2000. Conversely, the capital to assets ratio rose to 4.89 percent from 4.76 percent.

In the light of modest advances growth, three factors influenced the leverage ratio. First, deposits increased by \$8.7 billion in 2001. This deposit growth is about one-quarter of a turn of leverage. Second, the FHLBanks of Boston, Pittsburgh, Des Moines, San Francisco, and Seattle experienced asset shrinkage; thereby potentially becoming less leveraged. Third, the FHLBank of Pittsburgh actually became significantly more leveraged because capital declined by \$196 million. Capital declined by \$191 million, and leverage thus increased, at the FHLBank of Des Moines.

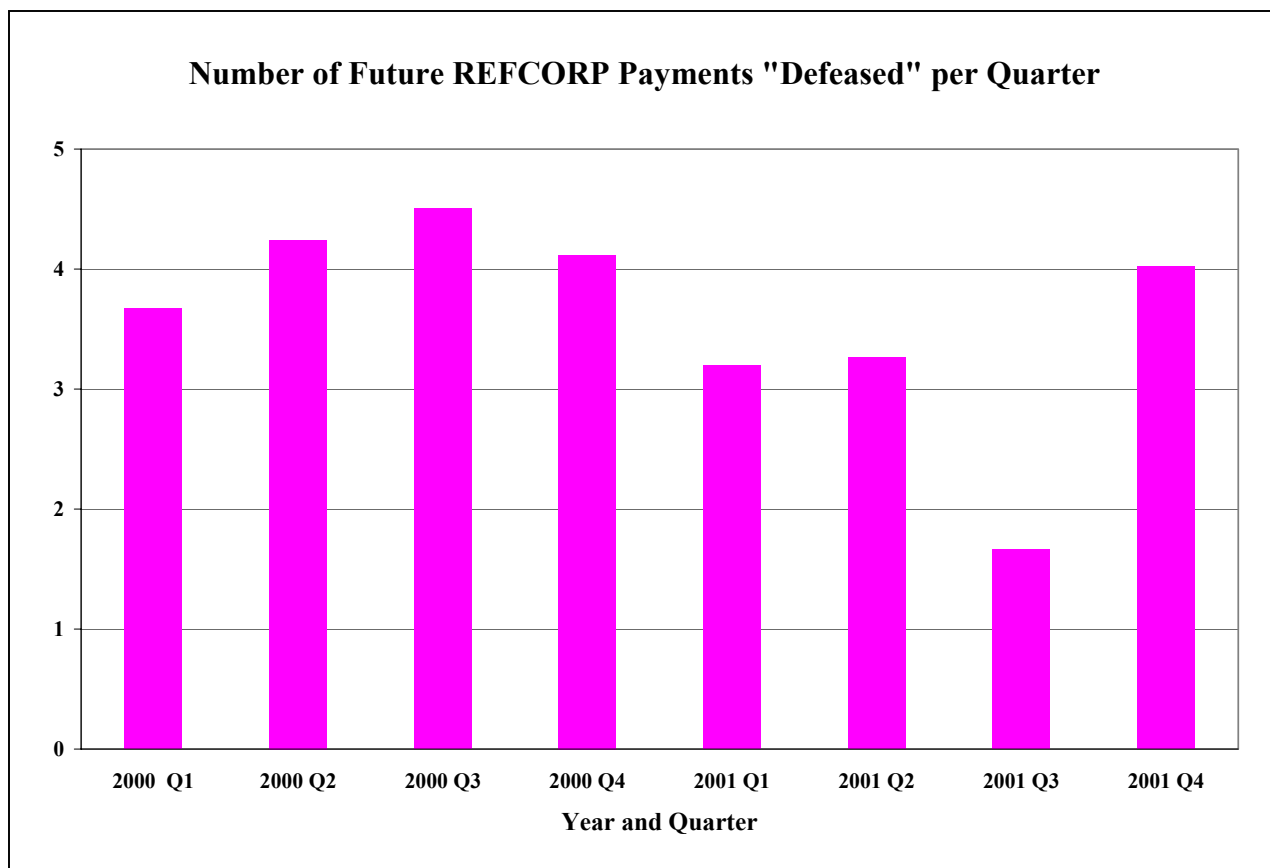
Finance Board regulations limit an FHLBank's leverage to 21 times assets unless non-mortgage assets, after deducting deposits and capital, do not exceed 11 percent of total assets. In that case, an FHLBank's leverage may be up to 25 to 1. All FHLBanks except Cincinnati and Seattle have non-mortgage assets, after deducting deposits and capital, less than 11 percent of total assets, thereby qualifying for 25 to 1 leverage.



At December 31, 2001, total capital of the FHLBanks was \$34.2 billion -- 97.3 percent of which is capital stock and 2.7 percent is retained earnings. Other comprehensive income, a component of capital, is less than 0.1 percent of total capital. Retained earnings have remained about 2 percent of total capital since the end of 1994.

In 2001, total capital increased by \$2.7 billion or 9 percent. The \$202 million increase in retained earnings in 2001 is equivalent to 9.5 percent of the period's net income. Conversely, the dividend payout ratio was 90.5 percent.

In the aggregate, the FHLBanks hold 19 cents in retained earnings for each \$100 of assets. Retained earnings range from 39 cents per \$100 of assets at the FHLBank of Pittsburgh to 6 cents per \$100 of assets at the FHLBank of San Francisco.



The Gramm-Leach-Bliley Act changed the FHLBanks' payment for a portion of the interest on bonds issued by REFCORP from \$75 million per quarter to 20 percent of net earnings after AHP expenses. That portion of a quarterly payment in excess of \$75 million is used to simulate the purchase of zero-coupon Treasury bonds to "defease" the most-distant remaining REFCORP payment of the FHLBanks.

Since the change in the REFCORP payment formula, the FHLBanks' quarterly REFCORP payments have been well in excess of \$75 million. In total, in the two years since the change in the payment formula, the FHLBanks have defeased almost 29 quarterly payments. As a result, the date of the final REFCORP payment of the FHLBanks has moved from April 15, 2030, to April 15, 2023, and two-thirds of that payment has already been defeased.

Going forward, the amount of future payments defeased will decline, all else being equal, because the future value of a zero-coupon bond will fall as the maturity shortens.

If the FHLBanks' income before assessments in any quarter falls below \$408 million, then previously defeased payments will be reinstated. (Actual income of the FHLBanks before assessments averaged \$750 million per quarter in 2001.)

Profitability

Net income for the FHLBanks for 2001 was \$2.154 billion. This is 2.8 percent less than net income for 2000.

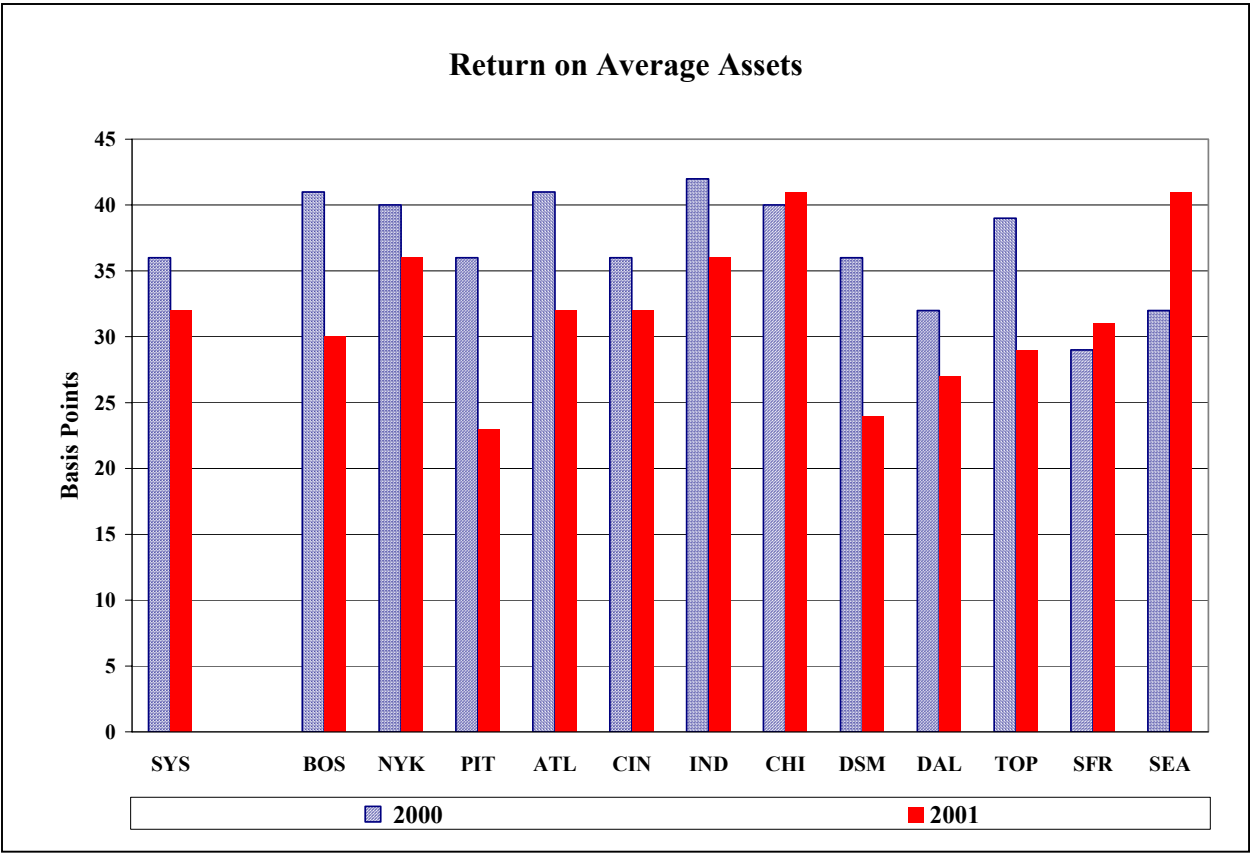
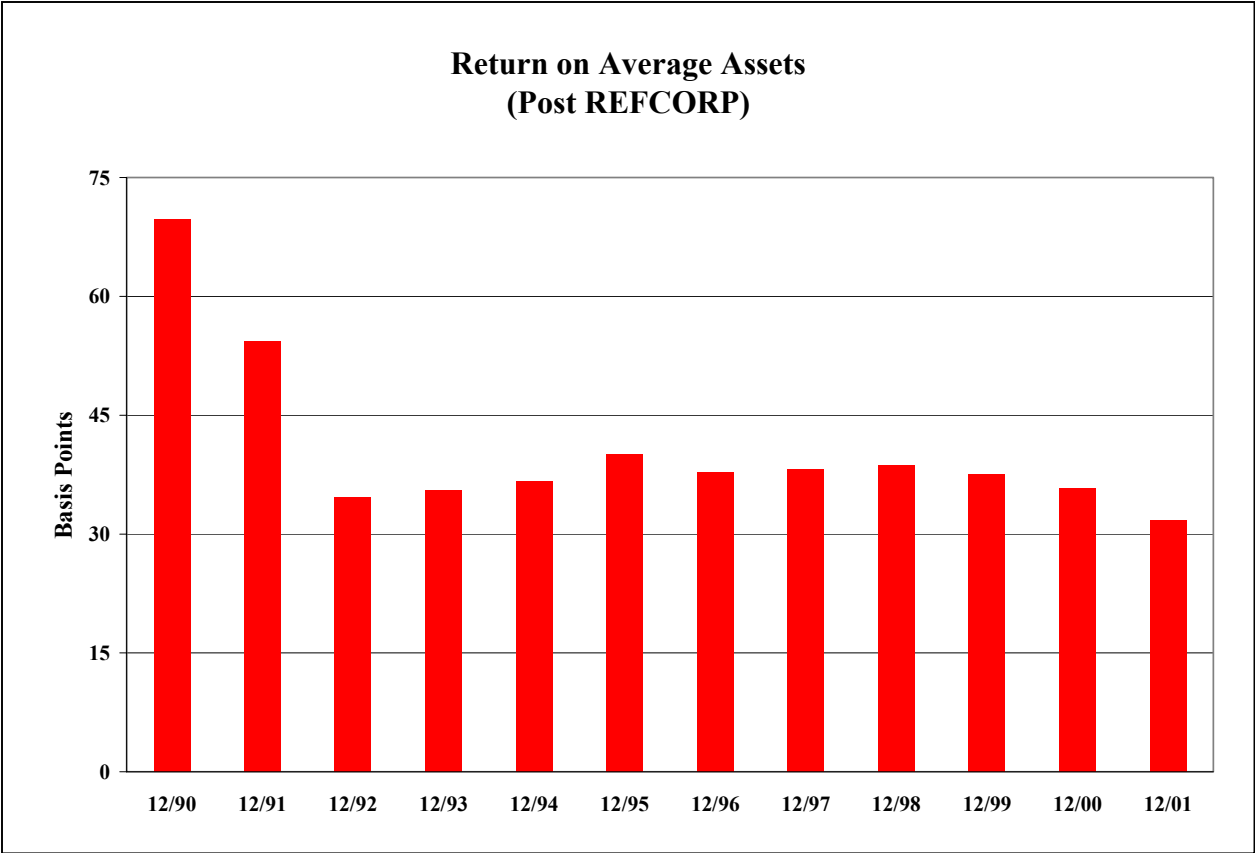
While the dollar level of net income decreased, income effects related to Statement of Financial Accounting Standards No. 133, “Accounting for Derivative Instruments and Hedging Activities” (SFAS 133), mask both an additional decline in income and a spread deterioration in the return on average assets. In particular, net SFAS 133 effects contributed \$97 million towards net income. Without the SFAS 133 effects, net income would have declined by \$154 million. In addition, the average balance sheet for 2001 was nearly 10 percent larger.

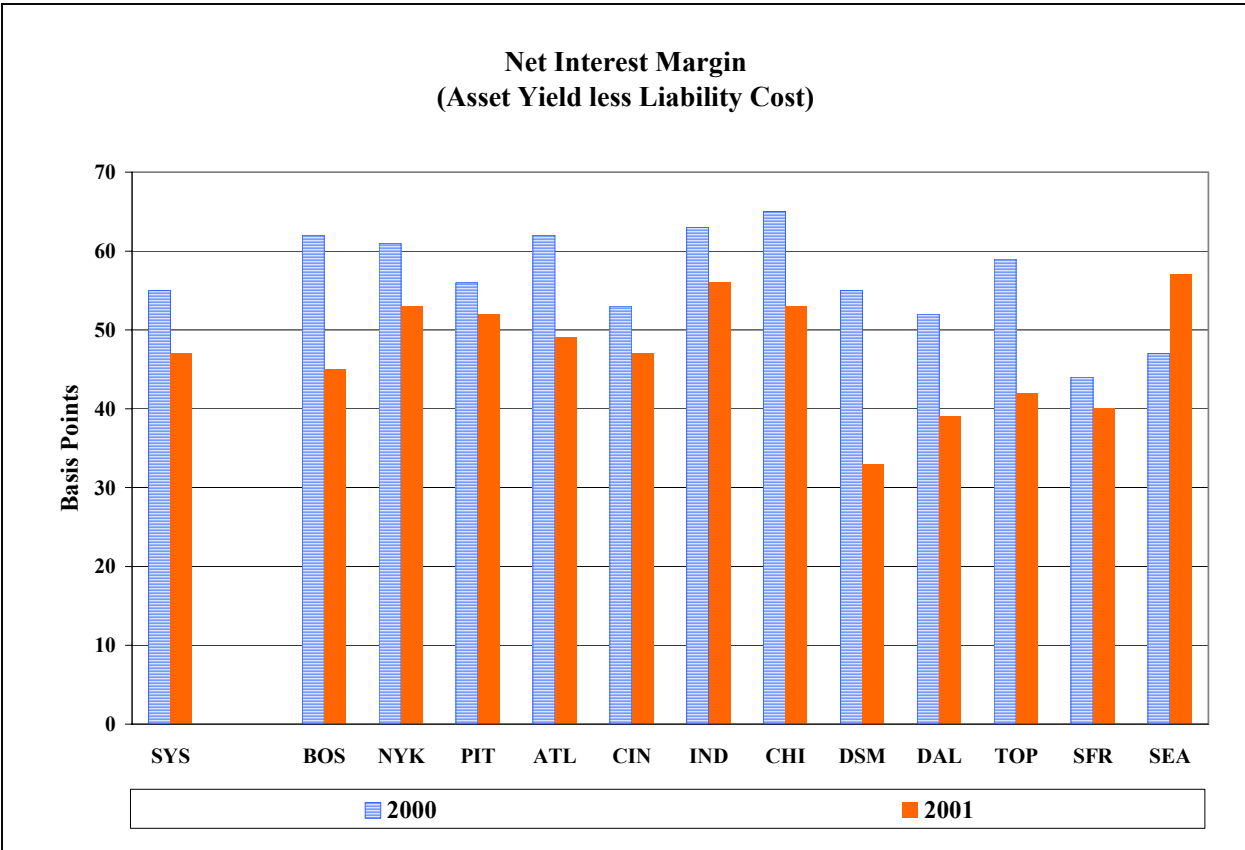
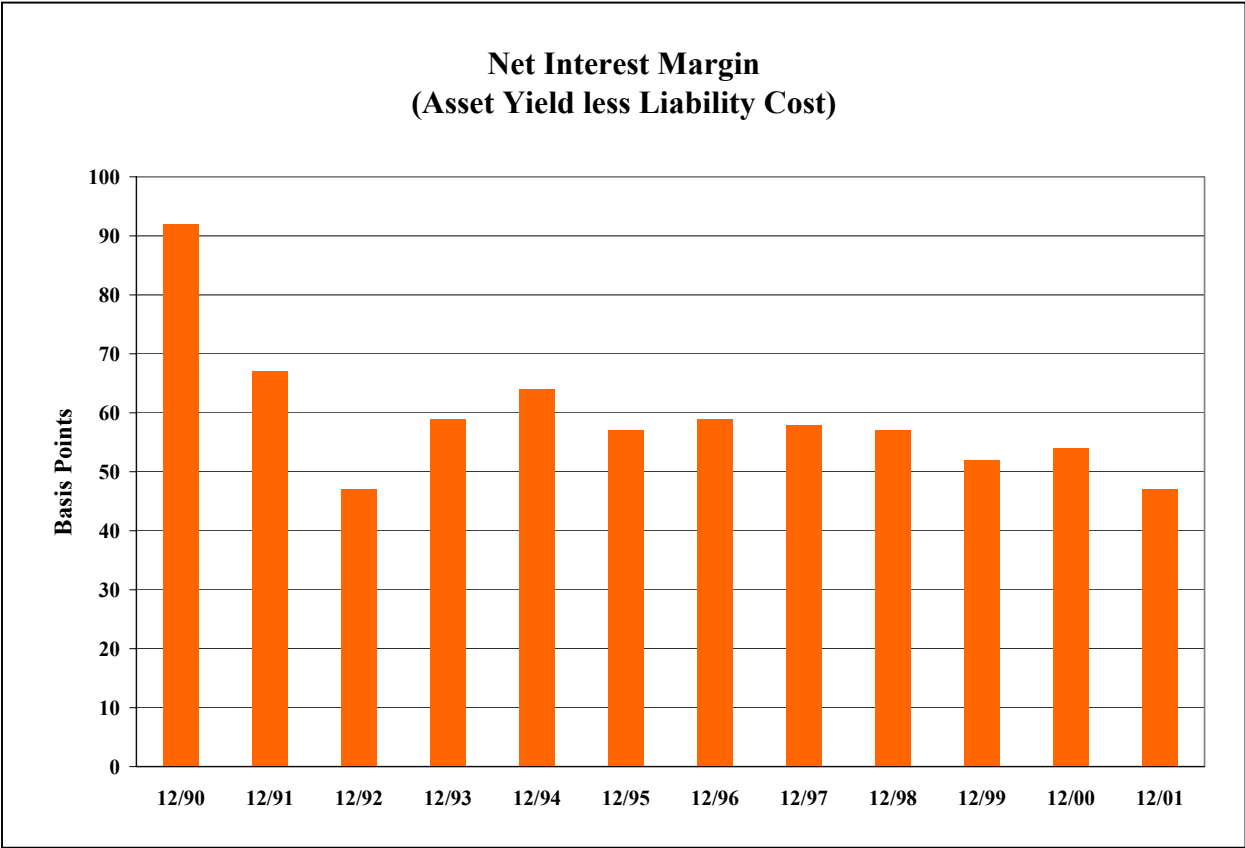
- ❑ Net income as a percent of average assets was 32 basis points in 2001 compared with 36 basis points 2000.
- ❑ The net interest margin was 47 basis points in 2001 compared with 55 basis points in 2000.
- ❑ The net spread between asset yields and liability costs was 21 basis points in 2001 compared with 22 basis points in 2000.

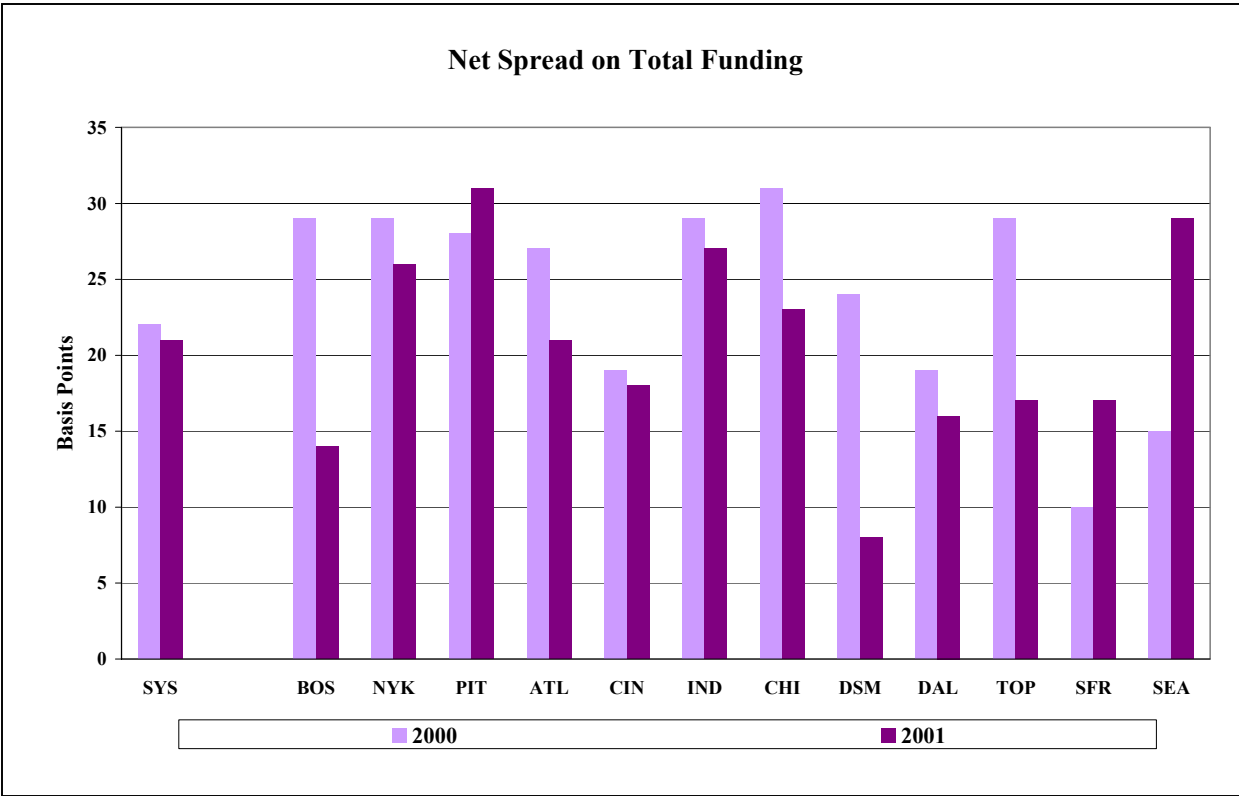
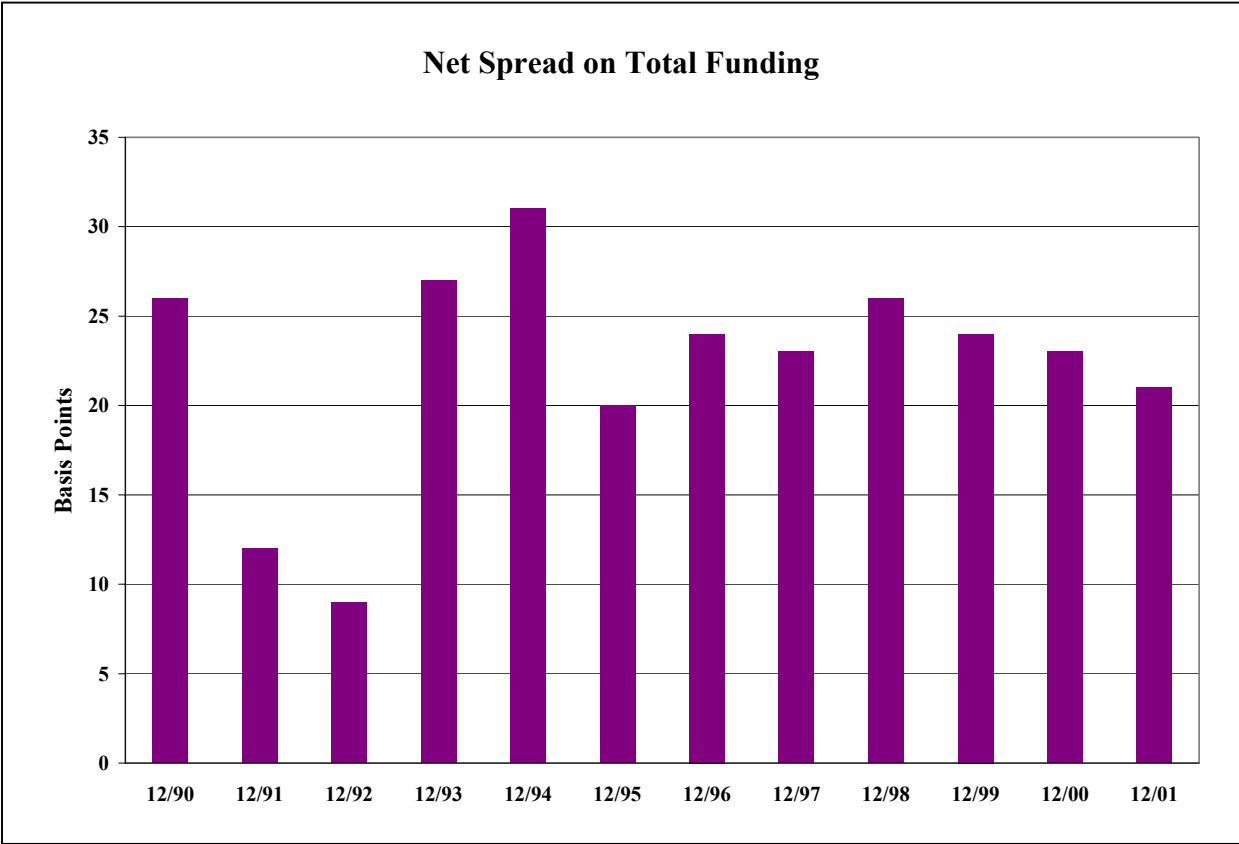
In short, asset yields have fallen by more than liability costs. This could reflect some asset-liability maturity mismatch or it could reflect some erosion of the agency funding advantage. There is some support of the hypothesis of the erosion of the agency funding advantage in that both swapped callable bonds and discount notes now trade at narrower sub-LIBOR spreads than in 2000.

The next three pages present historical data and FHLBank data for 2001 on three profitability measures – return on average assets, net interest margin, and net spread. These charts show deterioration in all three profitability measures since 1998. They also show some considerable variability in profitability among the FHLBanks.

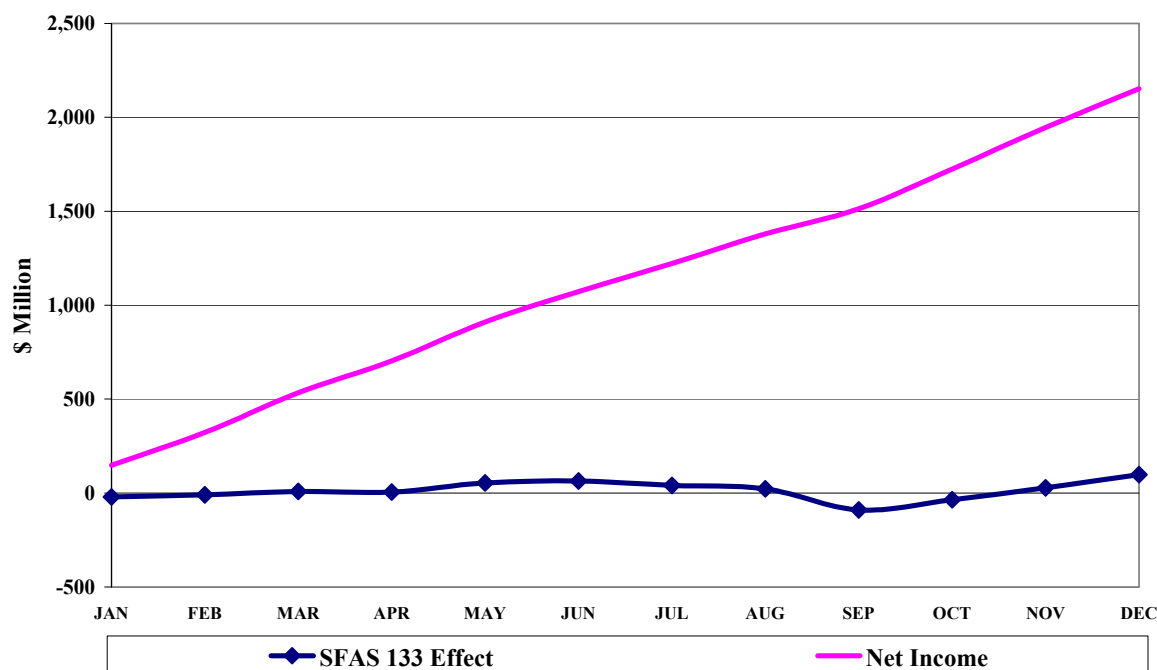
In 2001, the return on average assets fell at nine FHLBanks and increased significantly only at Seattle with an increase of 9 basis points to 41 basis points. The net interest margin fell at all FHLBanks except Seattle. The net interest margin ranges from 33 basis points at the FHLBank of Des Moines to 57 basis points at the FHLBank of Seattle. The net spread ranges from 8 basis points at the FHLBank of Des Moines to 31 basis points at the FHLBank of Pittsburgh.



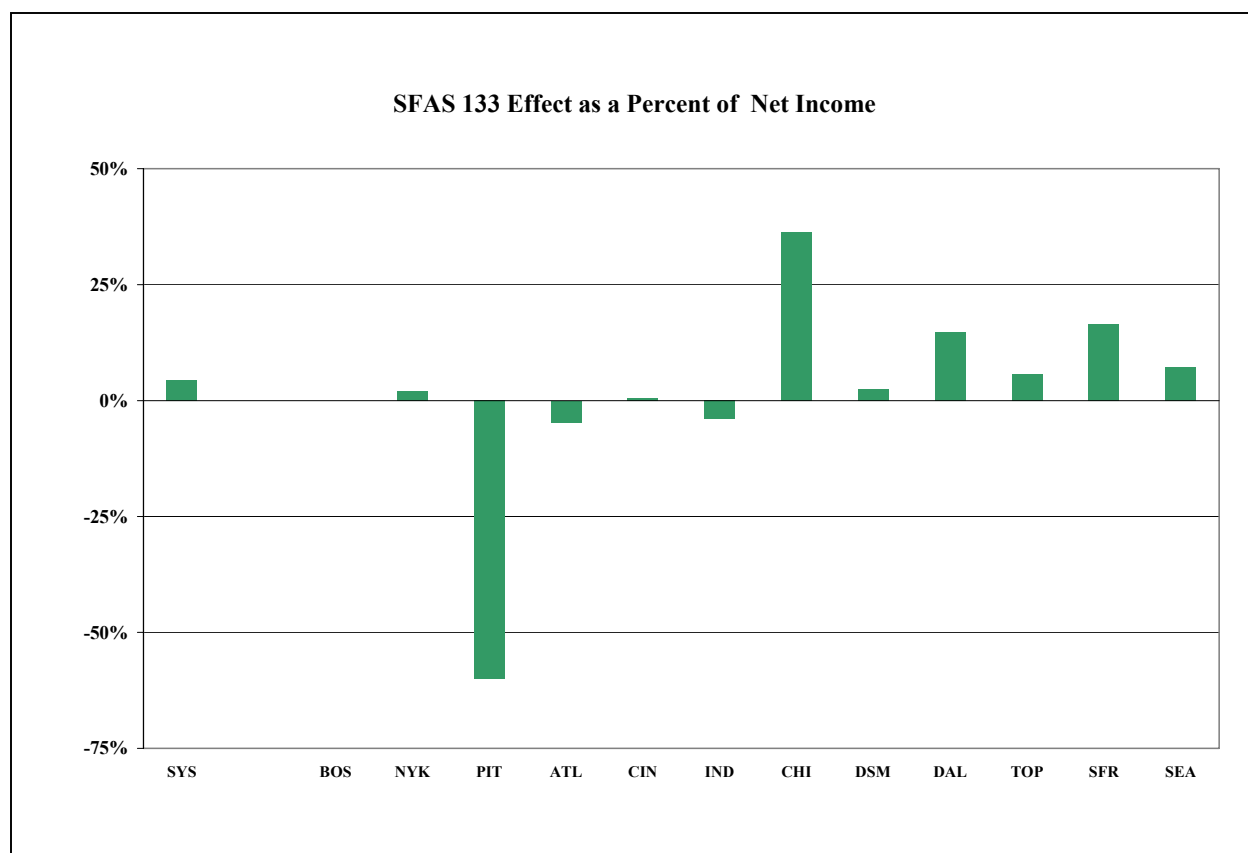




**Analysis of the Effects of SFAS 133 in 2001:
Cumulative Net Income and Cumulative SFAS 133 Effect**



The net effect in 2001 of the implementation of SFAS 133 was a positive \$97 million -- a \$30 million charge to earnings as the cumulative effect upon adopting the accounting principle, a \$30 million unrealized net gain on securities held at fair value during 2001, and a \$97 million net gain on derivatives and hedging activities during 2001. Without this \$97 million gain against net income of \$2.154 billion, the return on assets for 2001 would have been 31 basis points instead of 32 basis points. To the extent that the \$30 million gain and \$97 million gain reflect only timing differences or asymmetrical marking to market, both should reverse themselves in future accounting periods and depress future reported earnings.



The FHLBanks adopted SFAS 133 on January 1, 2001. The estimated effect of SFAS 133 has varied considerably across FHLBanks and across months. SFAS 133 had a significant negative effect (greater than 10 percent of net income) only on the FHLBank of Pittsburgh and significant positive effects only on the FHLBanks of Chicago, Dallas, and San Francisco. For the other eight FHLBanks, the net effect of SFAS 133 was less than 10 percent of net income.

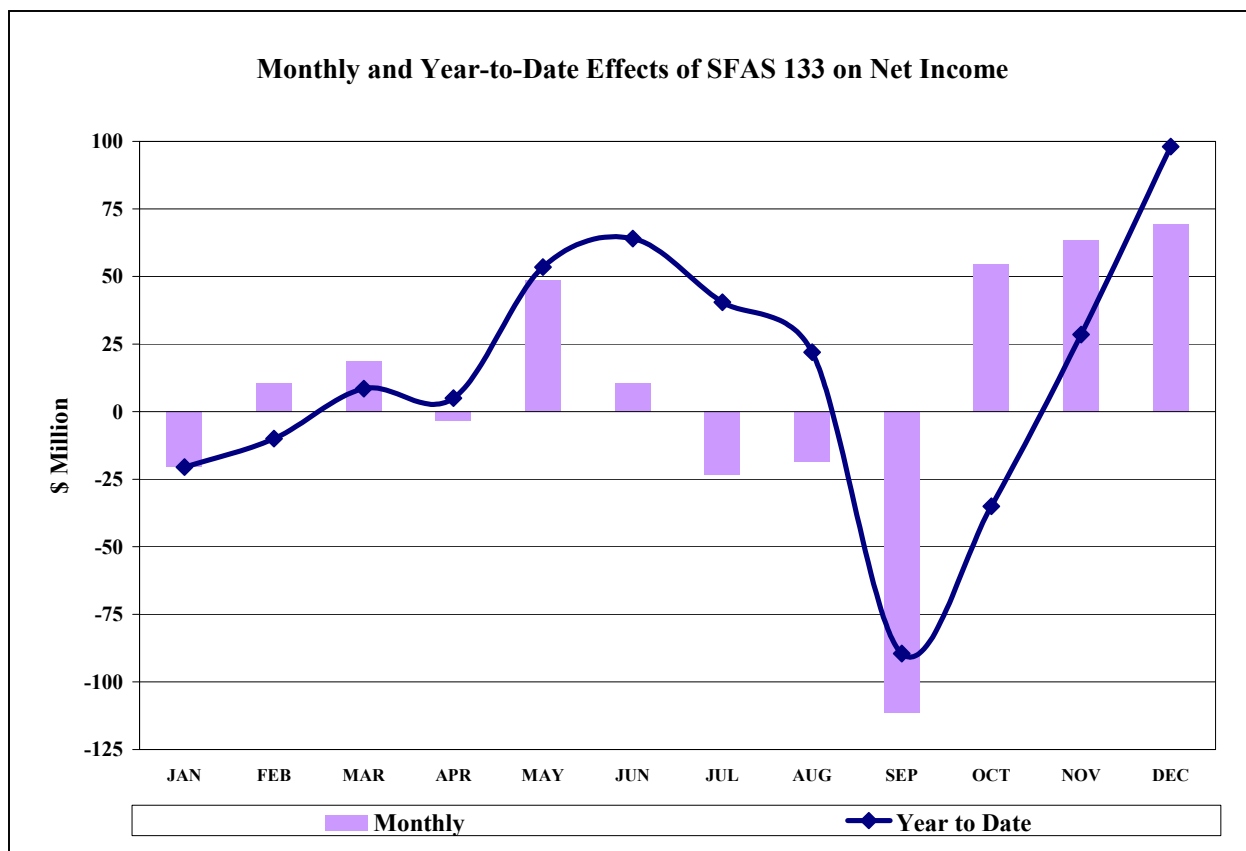
During the third quarter of 2001, the FHLBank of Pittsburgh recognized unrealized fair value losses on derivatives of \$84.2 million, only partially offset by unrealized gains on investment securities held at fair value of \$28.2 million.

SFAS 133 requires entities to recognize unrealized losses or gains on derivative positions regardless of whether offsetting gains or losses on the underlying assets or liabilities being hedged (in an economic sense) can be recognized in a symmetrical manner. Therefore, the SFAS 133 framework introduces the potential for a considerable mismatch between the timing of income recognition from assets or liabilities and the income effects of hedge instruments positioned to mitigate market risk and cash-flow variability.

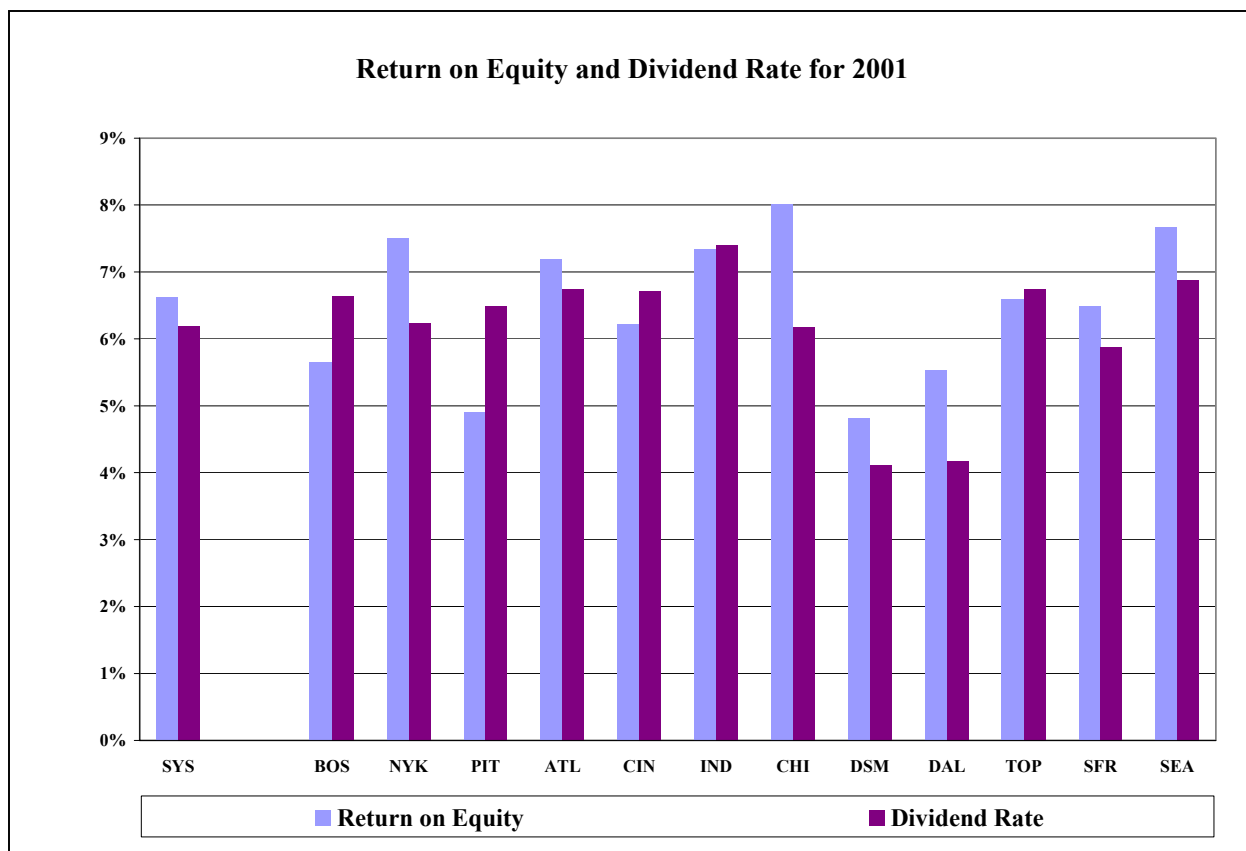
Notwithstanding the adoption of SFAS 133 in January 2001, the Pittsburgh FHLBank has generally continued its practice of using what it perceives as the most cost-efficient hedging techniques available - viewing the resulting accounting consequences to be an important but secondary consideration. The FHLBank of Pittsburgh anticipates that this approach shall result

in superior long-term performance at the expense of increased variability in GAAP quarterly earnings.

The magnitude of the Pittsburgh FHLBank's third quarter SFAS 133-related derivatives loss resulted from the combination of a larger-than-usual portion of hedges applied to held-to-maturity assets (whose unrealized net gains are not similarly recognized) in the face of an historic decline in market interest rates resulting from aggressive Federal Reserve monetary policy. Since then, the outstanding amount of the Pittsburgh FHLBank's hedges associated with held-to-maturity assets has declined. Additionally, the Pittsburgh FHLBank views the potential for another similar decline in market rates from their current historic lows as considerably less likely. Therefore, the current potential for another SFAS 133-related loss of comparable magnitude to that reported in the third quarter of 2001 is fairly limited. Nonetheless, during periods of significant changes in market rates, the Pittsburgh FHLBank's reported GAAP earnings is likely to continue to exhibit considerably greater variability than had been reported in previous years. As such, during periods when SFAS 133-based unrealized gains are reported, the FHLBank of Pittsburgh anticipates retaining excess earnings, and, conversely, during periods when unrealized losses are reported, the FHLBank intends to draw upon excess retained earnings as appropriate.



The cumulative effect of SFAS 133 on the FHLBanks was -\$20.5 million as of January 31. It rose to \$64 million by June 30, before falling to -\$89.5 million at September 30. However, the net cumulative effect turned sharply positive in the fourth quarter to end the year at \$98 million. The \$111.5 million SFAS 133 loss in September reflects the dramatic decreases in interest rates following the September 11 attacks.

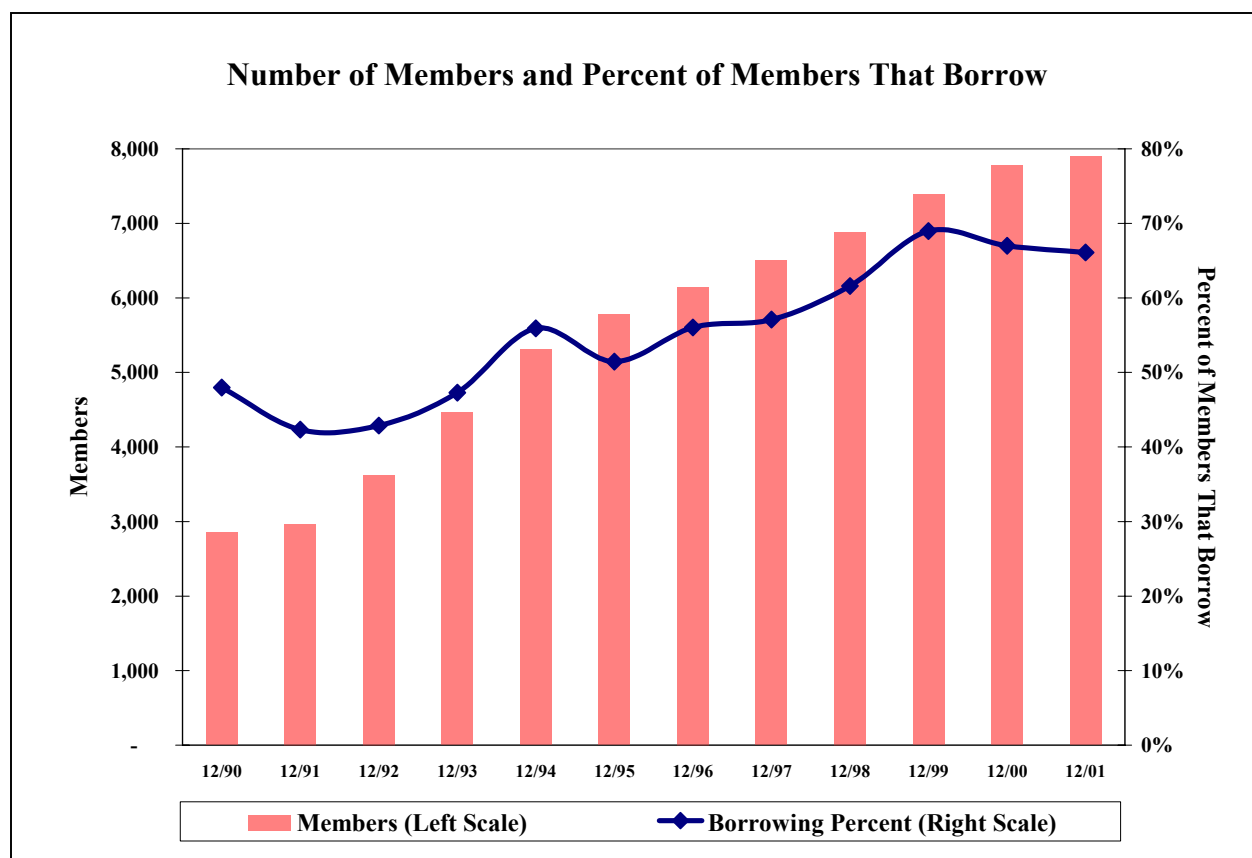


The return on equity for the FHLBanks in 2001 was 6.63 percent, down from 7.30 percent in 2000. The 2001 return on equity ranged from 4.82 percent at the FHLBank of Des Moines and 4.90 percent at the FHLBank of Pittsburgh to 8.01 percent at the FHLBank of Chicago. The SFAS 133 effects depressed the return on equity at the FHLBank of Pittsburgh, while unexpected mortgage prepayments depressed returns at the FHLBank of Des Moines. The return on equity increased by 9 basis points at the FHLBank of San Francisco and by 127 basis points at the FHLBank of Seattle, but declined at all other FHLBanks.

In 2001, the FHLBanks paid cash dividends of \$1.005 billion and stock dividends of \$946 million. The FHLBanks of Cincinnati, Chicago, Dallas, San Francisco, and Seattle pay stock dividends. The FHLBank of Topeka paid stock dividends through 1999, but now it pays cash dividends.

The average dividend rate for 2001 was 6.19 percent, down from 7.24 percent in 2000. The dividend rate ranged from 4.12 percent at the FHLBank of Des Moines and 4.18 at the FHLBank of Dallas to 7.41 percent at the FHLBank of Indianapolis. The FHLBank of Indianapolis historically has paid the highest dividend rate. In 2001, the dividend rate fell at all FHLBanks except Seattle.

Dividends exceeded net income at the FHLBanks of Pittsburgh and Cincinnati.

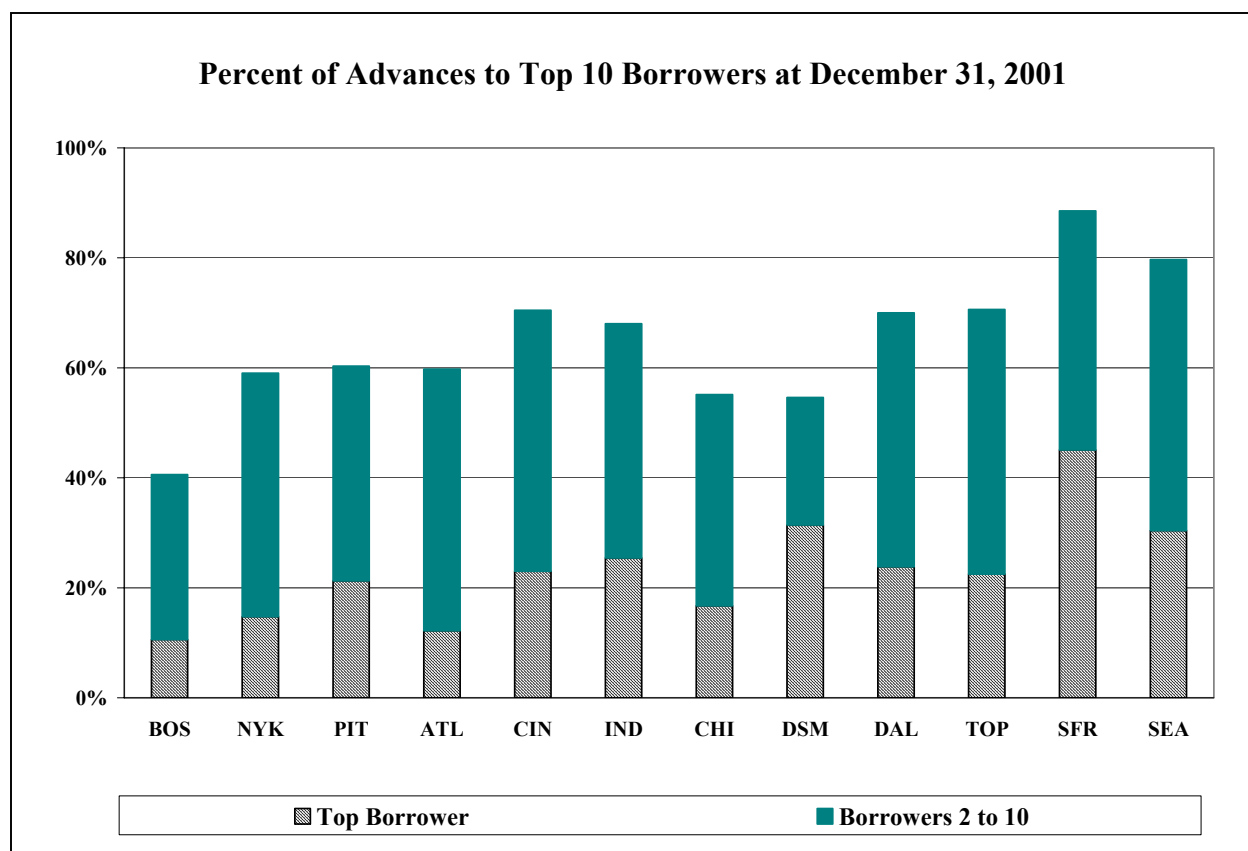


Reflecting significant penetration of the potential membership base and the continuing consolidation among financial institutions, the membership growth rate has slowed. The number of members grew by 1.6 percent in 2001 to 7,902. However, membership did increase in all districts except New York (decline of five) and Atlanta (decline of six). The FHLBanks of Des Moines and Atlanta have the greatest number of members at 1,222 and 1,171.

The number of borrowers increased in 2001 by 0.2 percent. The number of borrowers declined at the FHLBanks New York, Pittsburgh, Atlanta, Cincinnati, Dallas, and Topeka, but increased by 20 at the FHLBank of San Francisco. The average advance per borrowing member was \$86.2 million compared with \$83.2 million at the end of 2000.

The following table summarizes membership at December 31, 2001.

	Percent of Members	Percent of Advances	Percent of Capital Stock
Thriffs	18.8	54.3	49.4
Commercial Banks	73.2	43.9	47.1
Credit Unions	7.3	1.1	2.7
Insurance Companies	0.7	0.7	0.9
Totals	7,902	\$449.7 bil.	\$32.4 bil.



Borrowing is highly concentrated at the FHLBanks. Only the FHLBank of Boston has less than half of its advances concentrated among its top 10 borrowers. Furthermore, the FHLBanks of Indianapolis, Des Moines, San Francisco, and Seattle have more than 25 percent of their advances to their largest borrower.

When aggregated to the holding company level, the largest holders of advances at December 31, 2001 are:

Rank	Holding Company	Advances (\$bil.)	Percent of Advances	Cumulative Percent of Advances	Unsecured Credit (\$bil.)
1	Washington Mutual	69.712	15.5	15.5	2.654
2	Golden State Bancorp	22.323	5.0	20.5	0.225
3	Golden West Financial Corp.	18.037	4.0	24.5	--
4	ABN-Amro North America	9.681	2.2	26.6	1.540
5	BB&T Corporation	9.311	2.1	28.7	0.467
6	Bank of America Corporation	8.315	1.9	30.6	0.505
7	Charter One Financial	7.772	1.7	32.3	--
8	U.S. Bancorp	7.496	1.7	34.0	0.600
9	SunTrust Banks	6.999	1.6	35.5	0.469
10	Wells Fargo & Company	6.920	1.5	37.1	2.100

11	Sovereign Bancorp	6.034	1.3	38.4	0.371
12	Commercial Federal Corporation	4.898	1.1	39.5	0.130
13	Astoria Financial Corporation	4.859	1.1	40.6	--
14	Regions Financial Corporation	4.770	1.1	41.6	0.300
15	AmSouth Bancorporation	4.641	1.0	42.7	--
16	Greenpoint Financial Corp.	4.500	1.0	43.7	0.721
17	Southtrust Corporation	4.220	0.9	44.6	2.150
18	Lehman Brothers Bancorp	3.970	0.9	45.5	0.412
19	Citigroup, Inc.	3.718	0.8	46.3	0.463
20	Temple Inland, Inc.	3.422	0.8	47.1	--

Advances to the 20 largest borrowing organizations total \$212 billion. In addition, unsecured credit to these 20 organizations totaled \$13.1 billion, which was equivalent to more than 18 percent of the total unsecured credit exposure to all private counterparties.

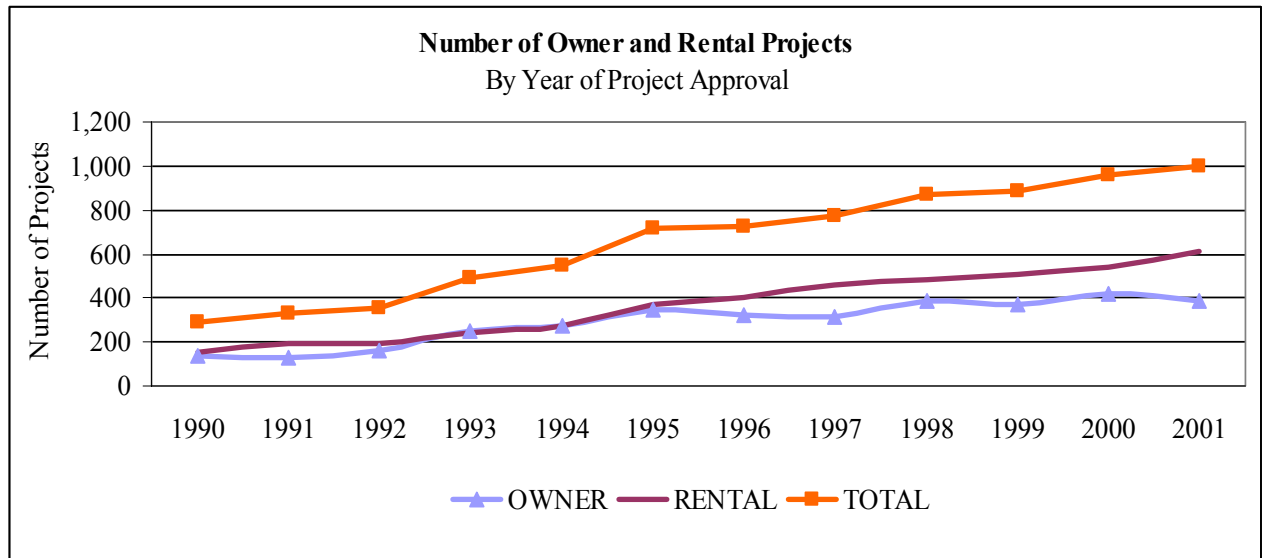
For each FHLBank, the same institution was the largest borrower at the end of both 2000 and 2001. The largest borrowers by FHLBank are as follows:

FHLBank	Borrower	Percent of the FHLBank's Advances	
		2000	2001
Boston	Webster Bank	8.7	10.6
New York	WAMU/Dime Savings Bank	12.2	14.8
Pittsburgh	Sovereign Bank	26.5	21.2
Atlanta	BB&T	12.4	12.2
Cincinnati	Charter One Bank	27.5	23.0
Indianapolis	Standard Federal Bank	18.3	25.4
Chicago	LaSalle Bank	15.2	16.7
Des Moines	Wells Fargo Bank	26.0	31.4
Dallas	WAMU/Bank United	21.6	23.8
Topeka	Commercial Federal Bank	21.2	22.5
San Francisco	Washington Mutual Bank FA	43.6	45.1
Seattle	Washington Mutual Bank	34.7	30.4

The largest borrowers of the FHLBank of Indianapolis and the FHLBank of Chicago are both subsidiaries of the same holding company -- ABN-Amro. The largest borrowers at the FHLBanks of New York, Dallas, San Francisco, and Seattle are affiliates of Washington Mutual, Inc.

Section II

Affordable Housing Program

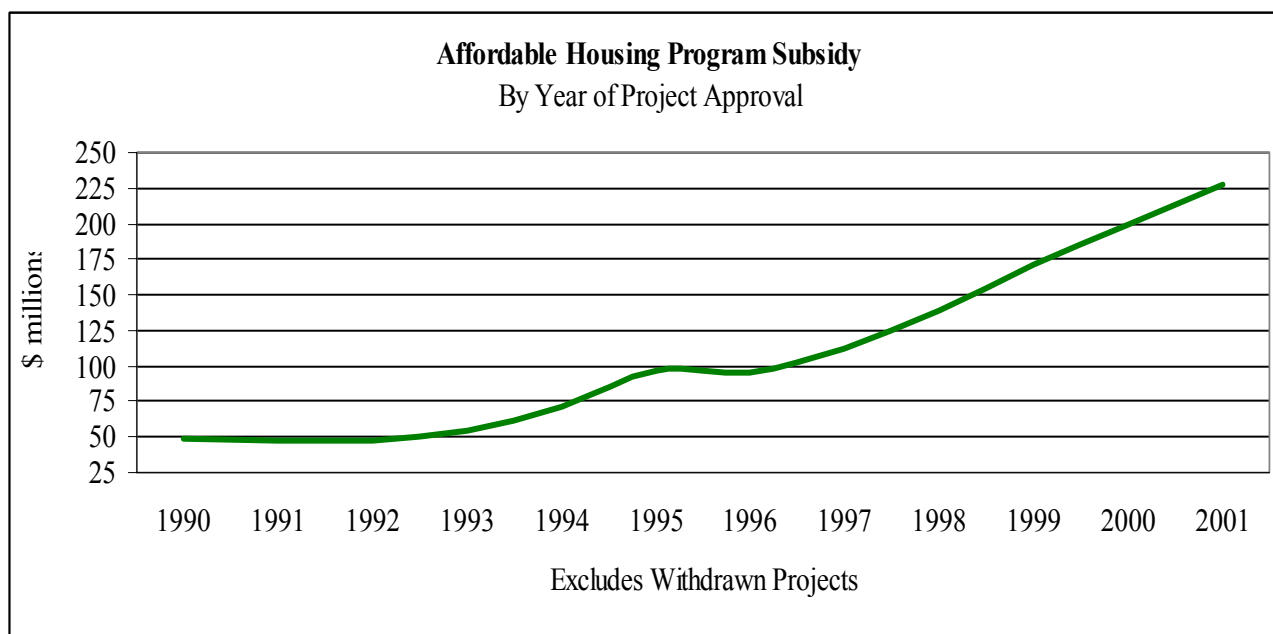


Fifty-six percent of the 7,931 Affordable Housing Program (AHP) projects are predominantly rental and 44 percent are predominantly owner occupied. (Some AHP projects contain both owner and rental units.) The typical rental project contains almost twice as many units as the typical owner-occupied project.

Reflecting the asset size of the Bank, San Francisco has 969 AHP projects, which is the highest total in the System. Just over two-thirds of the San Francisco, Boston, and Seattle projects are rentals. Cincinnati has the second-highest project total with 950, and the majority are owner occupied. Cincinnati has numerous small Habitat for Humanity projects. With 427, Topeka has the fewest AHP projects.

Of the 4,431 rental projects, 2,234 will use low-income housing tax credits.

	1990-2001	2001 Only
Subsidy	\$1,312.3 million	\$227.8 million
Units	276,578	37,837
Percent Rental Units	68.2	72.7
Percent Very Low Income Units	73.9	73.7
Number of Projects	7,931	1,000



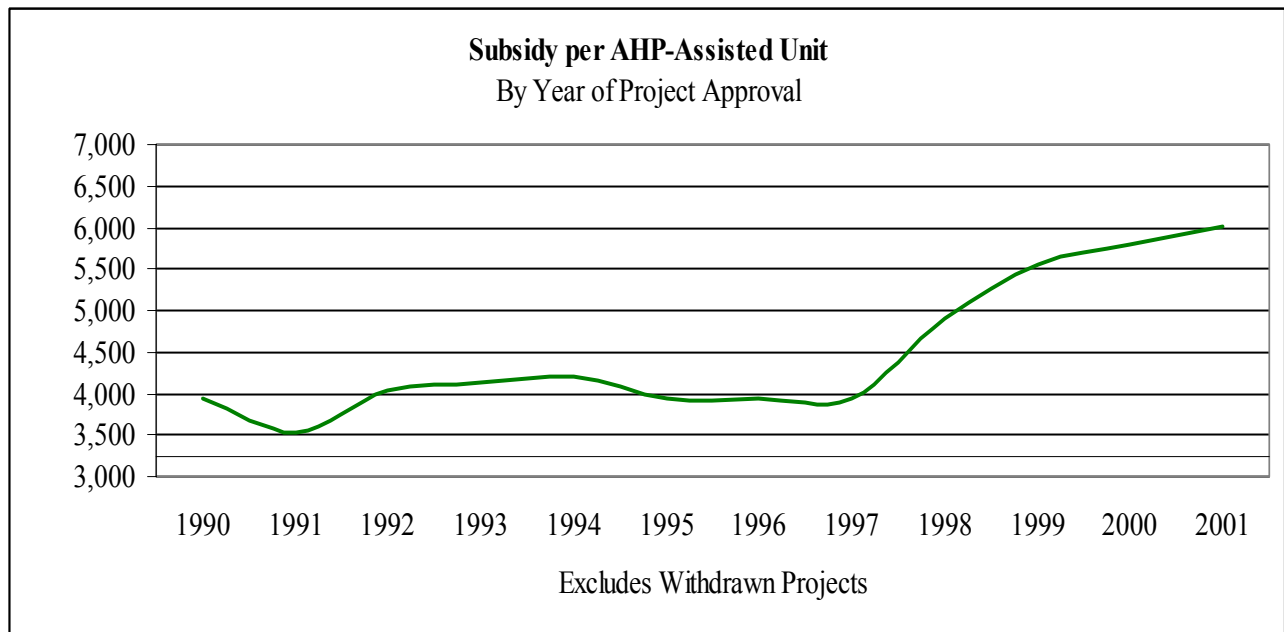
The FHLBanks have made commitments of \$1,312.3 million to AHP projects that are either completed or in the planning, development, or construction phases.

AHP contributions are determined by a statutory formula, which is the greater of \$100 million or 10 percent of net income after the payment for interest on bonds issued by the Resolution Funding Corporation (REFCORP). The contributions were \$169.2 million in 1998, \$199.4 million in 1999, \$245.7 million in 2000, and \$239.3 million in 2001. There is a one-year lag between contributions and commitments, and the \$239.3 million contributed in 2001 will finance projects approved in 2002. Because of the level of projected System net income, AHP contributions are likely to be determined by the 10 percent-of-income rule for the foreseeable future.

AHP commitments to non-withdrawn projects range from approximately \$49 million for projects approved in 1990 through \$228 million for projects approved in 2001.

Almost 1,000 of the 8,663 originally approved AHP projects have been withdrawn by the member, and many other projects did not use all the AHP funds originally awarded to the project. In both cases, the AHP funds are returned to the FHLBank for re-commitment in the next AHP funding round or to fund approved alternate projects.

The cumulative amount of AHP subsidy committed per FHLBank ranges from \$235 million at San Francisco and \$183 million at Atlanta to \$62 million at Topeka and \$70 million at Chicago.

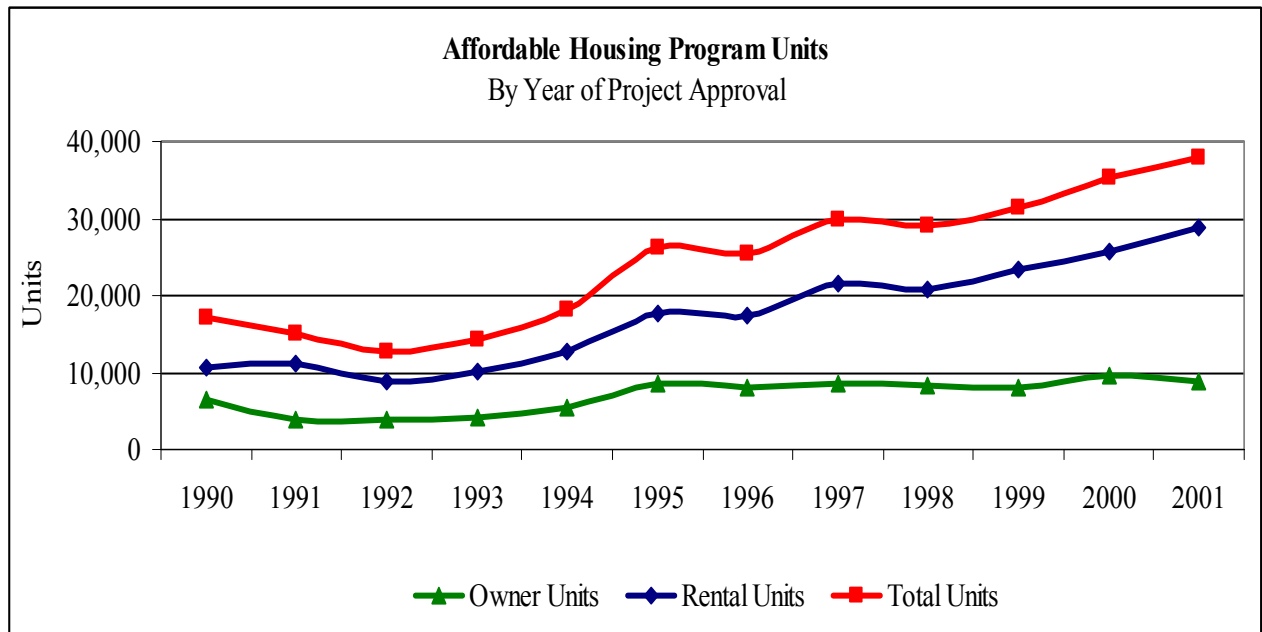


The average per-unit subsidy is \$4,745.

The amount of AHP subsidy per unit of \$6,020 in 2001 was approximately \$2,100 higher than for units approved in 1990. As the aggregate contributions have increased, the relatively stable per-unit subsidy until 1998 has allowed the number of units assisted to grow almost in tandem with the amount of aggregate contributions.

The average per-unit subsidy ranges from a high of \$6,075 at New York to a low of \$3,379 at Topeka. The per-unit subsidy reflects more Bank practice than local conditions in that San Francisco has a per-unit subsidy 25 percent less than New York, and other districts in the central part of the country have an average per-unit subsidy much higher than that of Des Moines.

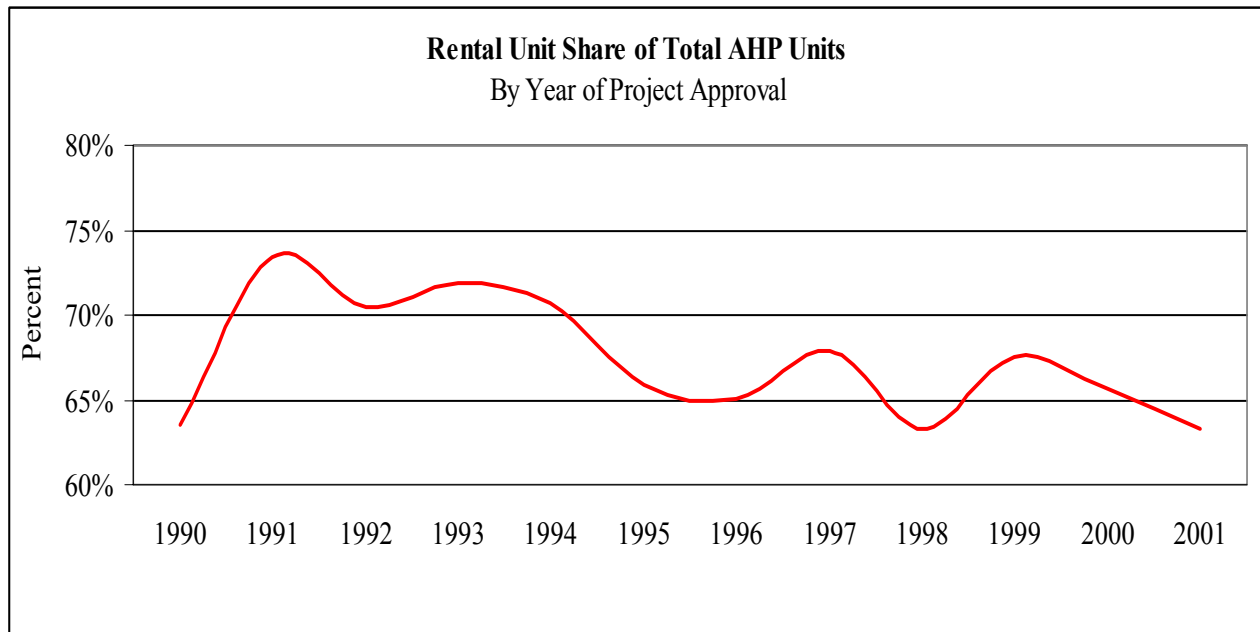
On average, AHP funds cover 6.3 percent of the cost of a project.



Since 1990, AHP funds have subsidized 292,825 housing units. In 2001, approved projects contained 37,838 units. The number of AHP units can be expected to grow by between 36,000 and 40,000 units per year.

The number of approved AHP units ranges from 53,536 at San Francisco and 38,415 at Atlanta to 16,215 at Indianapolis, 18,227 at Pittsburgh, and 18,621 at Cincinnati.

AHP serves a number of special-needs populations. For example, 30 percent of the units will serve elderly households and 32 percent of the units will serve formerly homeless households. Thirty-eight percent of the projects have handicapped-accessible units.

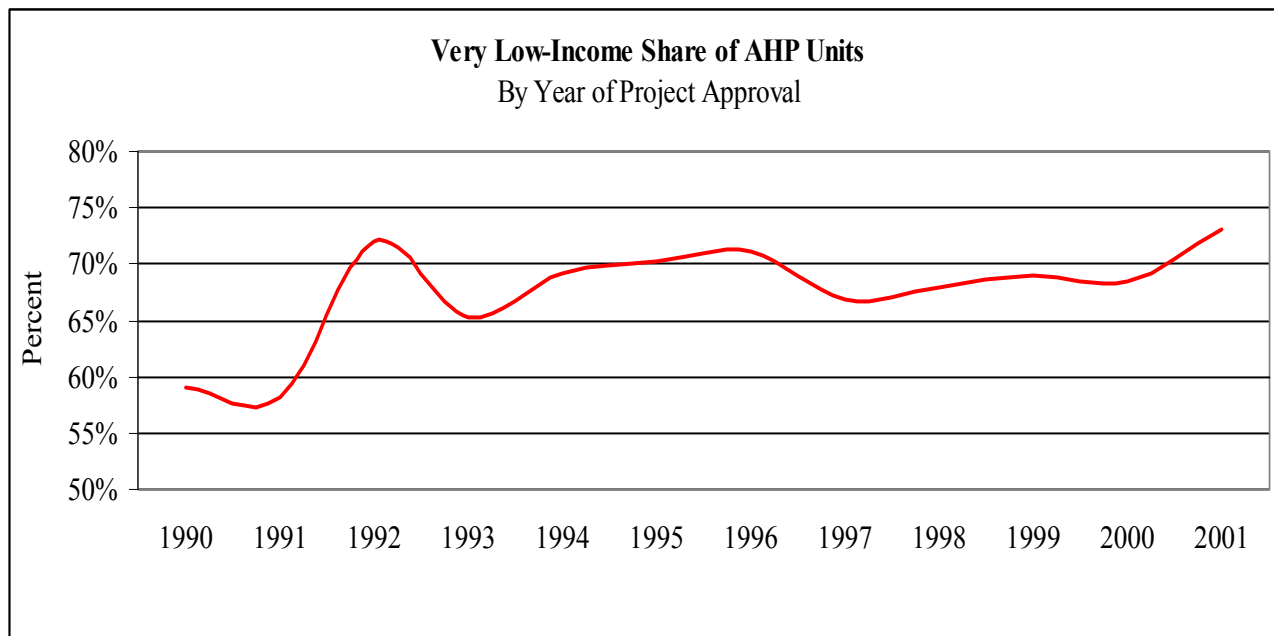


AHP predominantly subsidizes rental units. The historical share of total AHP units that are rental has ranged from 63 to 74 percent. Rental units dominate owner-occupied units because of the availability of additional subsidies for rental housing, for example, low-income housing tax credits, and the lower development cost of rental housing due to shared walls and more intensive land use.

The former AHP scoring system favored projects that had lower per-unit subsidies, greater percentages of very low-income residents, and longer periods of affordability. These criteria tended to favor rental projects. The rental share has declined in recent years as a result of the homeownership set-aside programs at the FHLBanks.

For projects approved in 2001, the average per-unit subsidy on owner-occupied projects of \$6,519 exceeds the average per-unit subsidy of \$5,866 on rental projects. As a result, the rental project share of AHP subsidies of 75 percent is less than the 77 percent rental unit share.

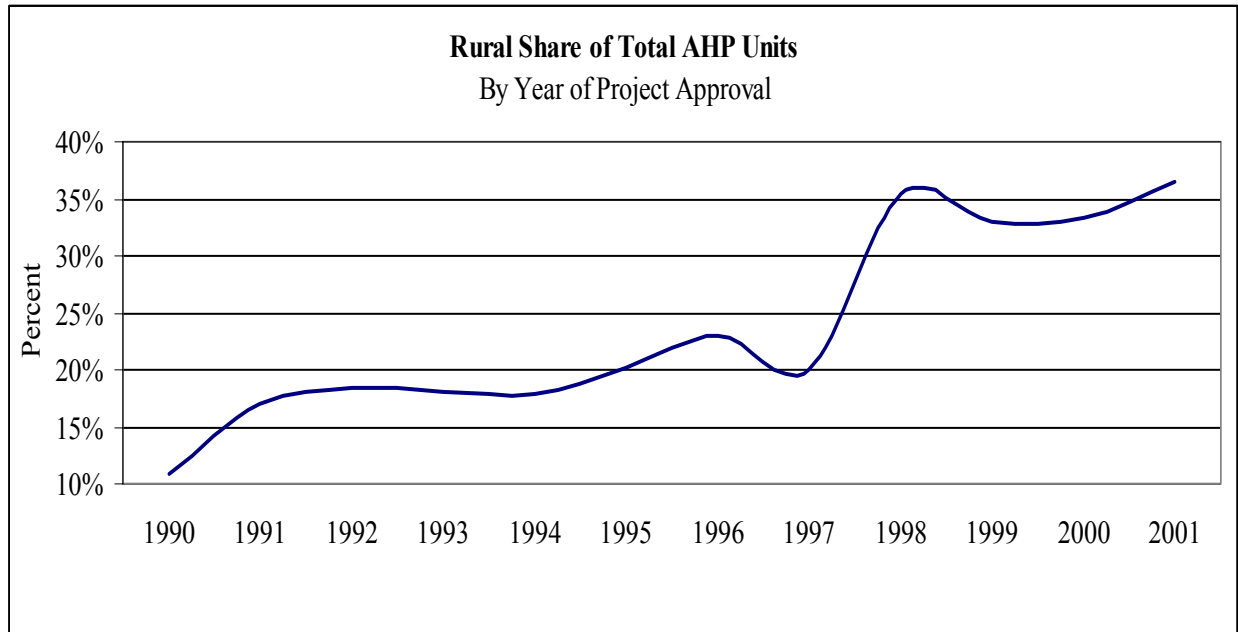
Dallas has the lowest share of rental units at 49 percent, while San Francisco and New York at 82 percent and Indianapolis at 78 percent have the highest share of rental units. Dallas has traditionally experienced strong member demand for AHP funds for home ownership projects.



Sixty-eight percent of AHP-assisted units are for very low-income households. Since 1993, the share of AHP units for very low-income households has varied between 67 and 72 percent.

Of the very low-income units, 25 percent are owner-occupied and 75 percent are rental.

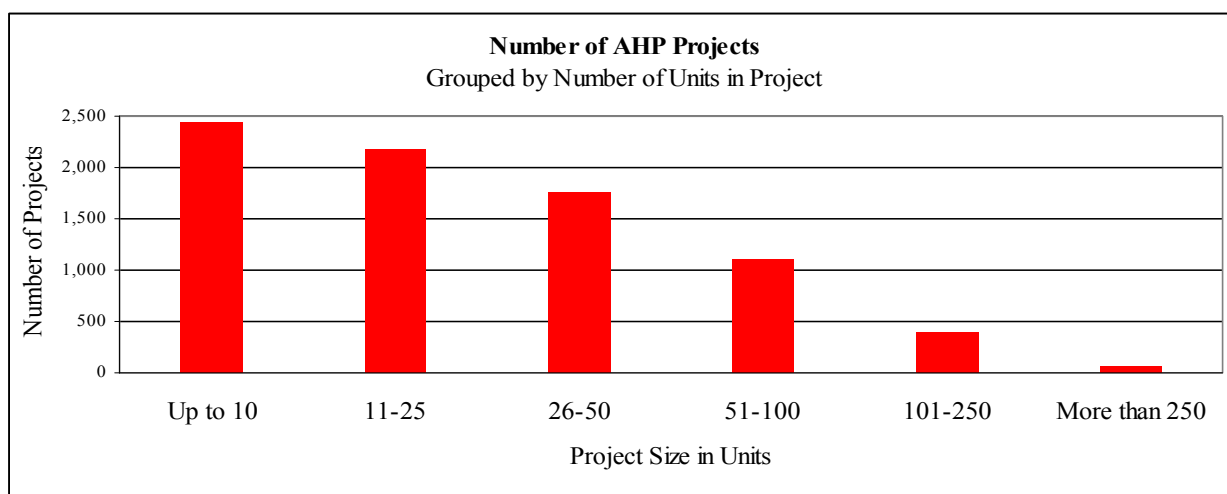
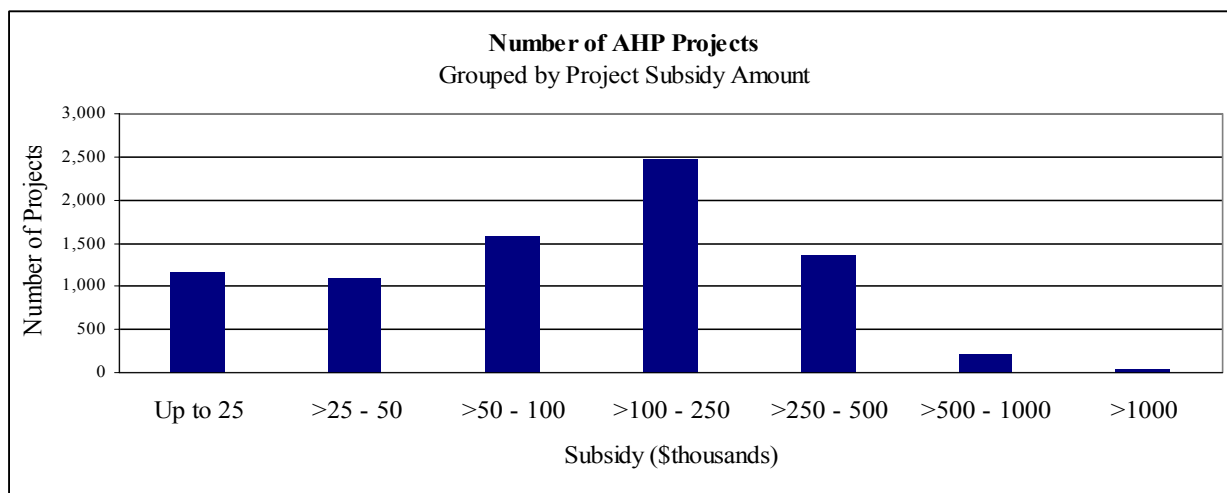
More than 53 percent of the AHP units in every district are for very low-income households. Des Moines has the highest share of very low-income units at 77 percent, while Chicago is the lowest at 54 percent.



Twenty-six percent of AHP-assisted units, over the 1990-2001 period are in rural areas. This approximates 20 percent of the country's population that lives outside of metropolitan statistical areas.

The increase in the rural share of AHP units through time may be attributable to the rural district priority that several districts have adopted for some years.

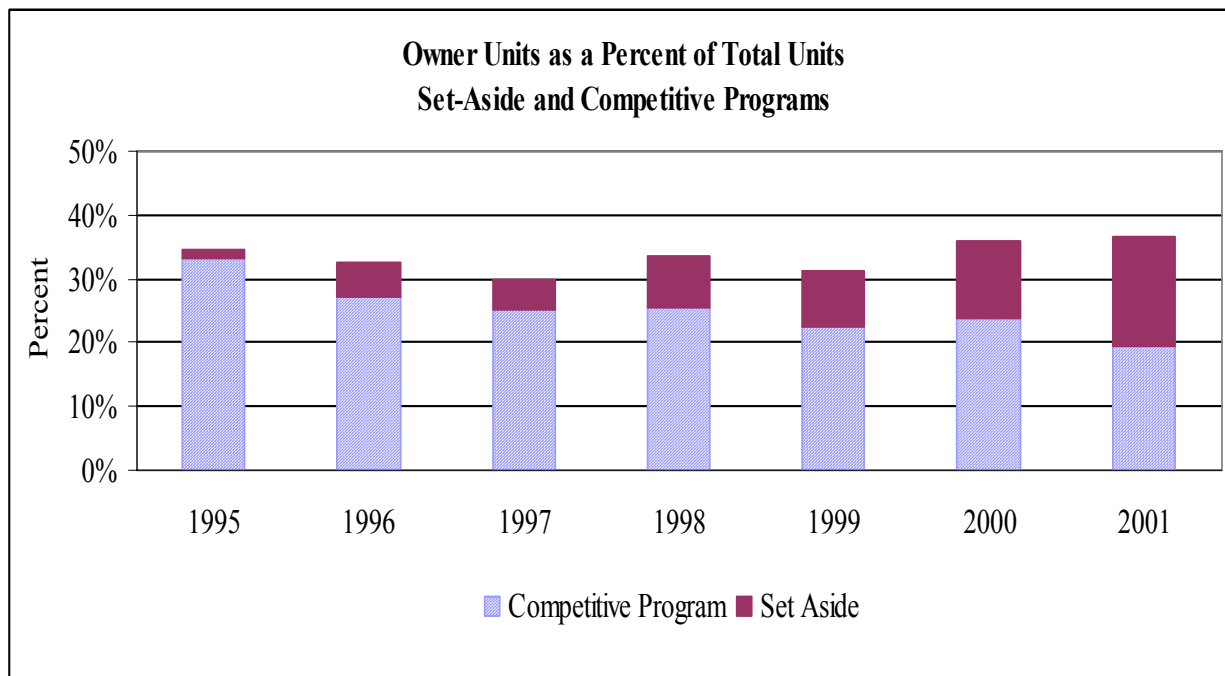
More than 30 percent of the total number of units at Atlanta, Cincinnati, Dallas, Topeka, and Seattle are located in rural areas. Only 11 percent of the San Francisco units and 10 percent of the New York units are located in rural areas.



Only 31 projects (0.4 percent of the total) have more than \$1 million of AHP subsidy, and only 214 (2.7 percent) have between \$500,000 and \$1 million of subsidy. Forty-eight percent of AHP projects have \$100,000 or less of subsidy.

AHP projects are predominantly small projects. Only 54 AHP projects (0.7 percent of the total) have more than 250 units, and only 397 projects (5.0 percent of the total) have between 100 and 250 units. Thirty-one percent of AHP projects have 10 or fewer units.

The average owner-occupied AHP project has 22 units and the average rental project has 45 units. The average number of units per project fell from 43 in 1990 to 27 in 1993. Since then, the average number of units per project has increased to 38 in 2001.



Ten of the FHLBanks offer AHP funds to their members through the homeownership set-aside program. Dallas will begin offering set-aside program funds in 2002 leaving Boston as the only Bank without such a program. These funds are used to help pay the downpayment and/or closing costs for low-income homebuyers.

As participation in this program has become more popular, home-ownership set-aside units have grown to 14.2 percent of total AHP units in 2001 from 1.5 percent of AHP units in 1995.

Of the FHLBanks that offer this program to its members, Seattle has the highest percentage of set-aside subsidy as a percentage of total subsidies at 28 percent, while Des Moines and Atlanta have the lowest at 10 percent and 11 percent.

Out-of-District Projects

As the consolidation of the banking industry continues, a growing number of FHLBank members will have branch offices in more than one FHLBank district. Members with inter-district branches may wish to submit AHP applications to assist low- and moderate-income households in States outside their district. Since 1990, a total of 185 projects located outside of the member's district have received AHP funding. This amounts to 2.3 percent of the number of AHP projects.

AHP subsidy associated with out-of-district projects represents 3.1 percent of total subsidy.

The FHLBanks of Boston and Topeka have no out-of-district projects, having explicit policies against funding such projects.

The FHLBank of Cincinnati has 60 out-of-district projects representing 13.6 percent of its total subsidy. Charter One Bank, Key Bank, and Union Planters Bank account for 40 of these projects.

Number of Out-of-District Projects											
District of Member											
	NYK	PIT	ATL	CIN	IND	CHI	DSM	DAL	SFR	SEA	Total
District BOS			1	1					2		4
of NYK		8		22					5		35
Project PIT	1		8	2							11
ATL		2		5					14		21
CIN			14		2	1			1		18
IND				6		1	1				8
CHI					3		5		6		14
DSM									5		5
DAL			17	18					1	1	37
TOP				3			4		2		9
SFR							4	3		4	11
SEA				3			9		1		13
Total	1	10	40	60	5	2	23	3	37	5	186

The FHLBank of Atlanta has 40 out-of-district projects representing 5.0 percent of its total subsidy. Amsouth Bank is the member associated with 19 of these projects.

The FHLBank of Des Moines has 23 out-of-district projects. U.S. Bank accounts for 17 of these projects.

The FHLBank of San Francisco has 37 out-of-district projects. Citibank FSB, California Federal Bank, and World Savings account for all but four of these projects.

Percent of AHP Subsidy Associated with Out-of-District Projects										
District of Member										
<u>NYK PIT ATL CIN IND CHI DSM DAL SFR SEA</u>										
District of Project	BOS		0.3	0.3					0.1	
	NYK	1.6		4.5					0.6	
	PIT	1.0	0.9	0.6						
	ATL	0.2		0.7					1.5	
	CIN		1.8		0.6	0.1			0.1	
	IND			1.7		0.7	0.6			
	CHI				0.6		0.9		0.6	
	DSM								0.4	
	DAL		2.2	5.1					0.1	0.1
	TOP			0.6			0.6		0.2	
	SFR						0.8	0.2		1.2
	SEA			0.2			0.7		0.0	
	Total	1.0	1.8	5.2	13.7	1.2	0.8	3.6	0.2	3.6

Section III

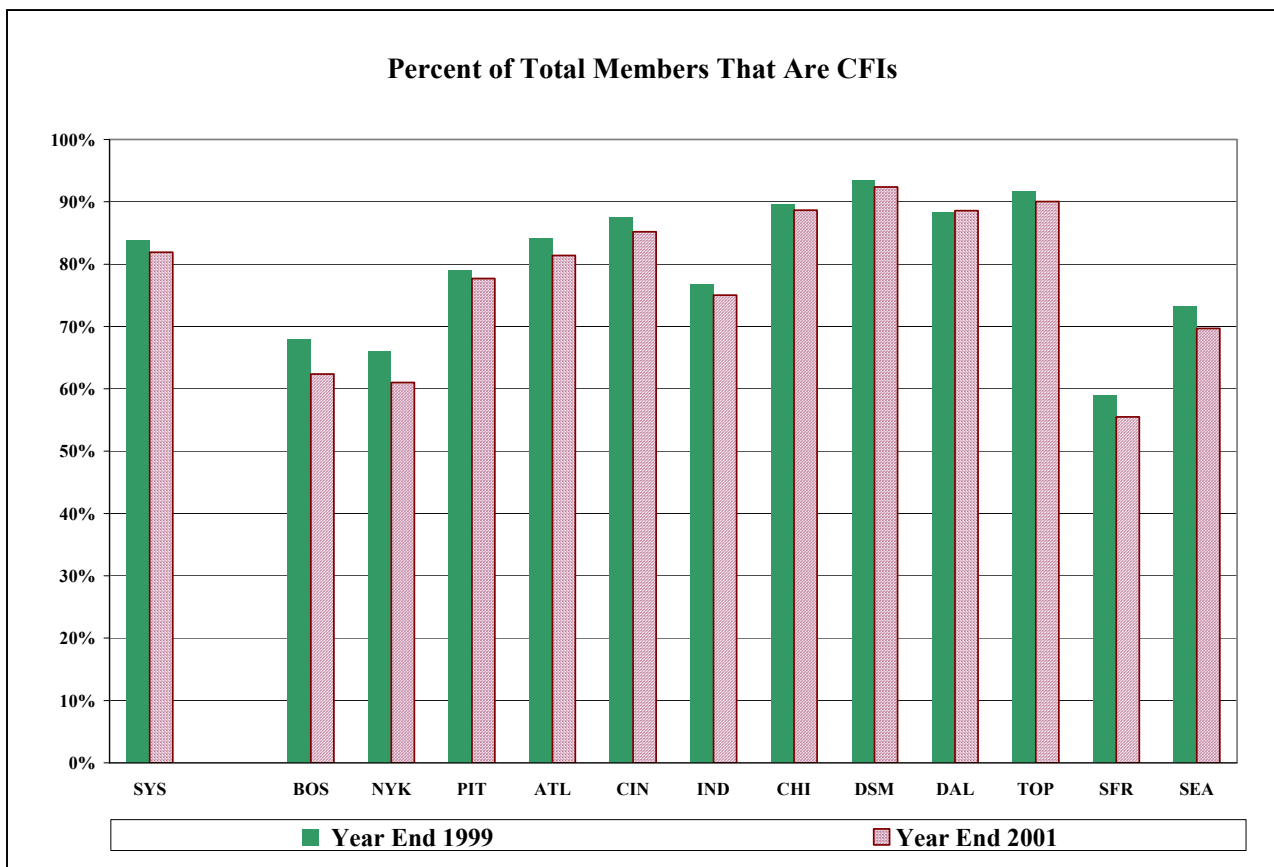
Community Financial Institutions

Community Financial Institutions

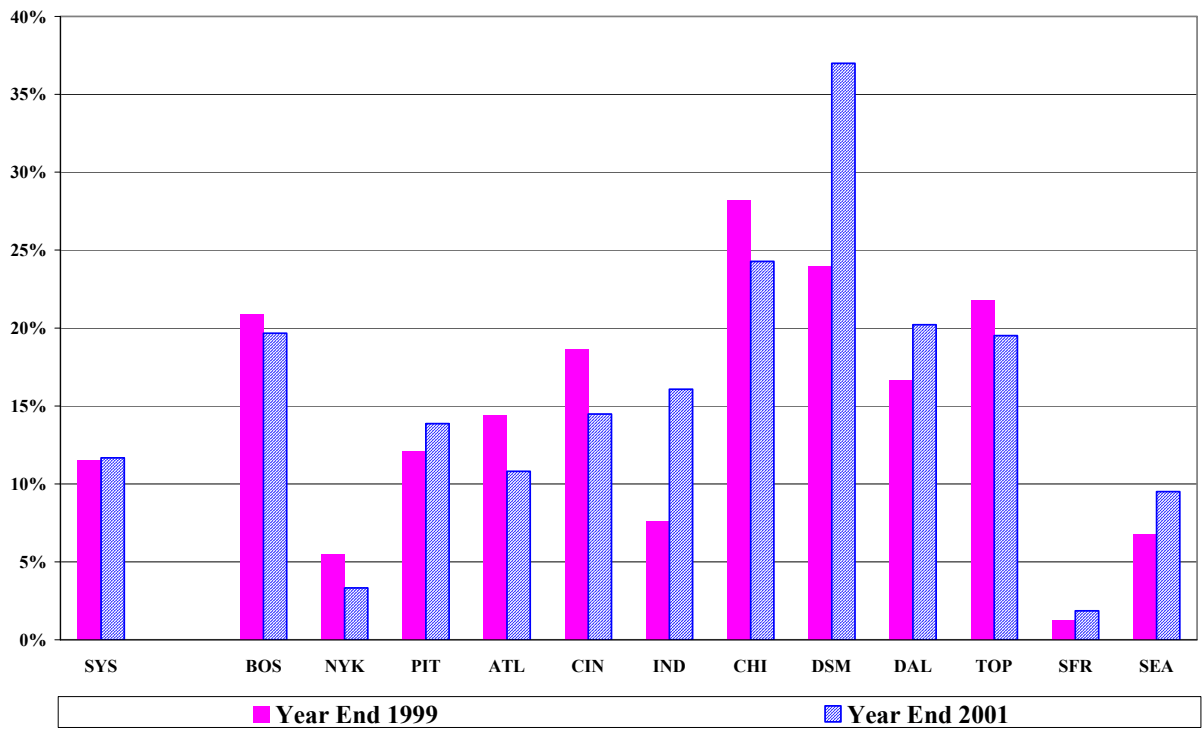
The Gramm-Leach-Bliley Act contained two substantive provisions dealing with smaller banks and thrifts. It expanded the types of collateral that small members may pledge and it also eased FHLBank membership requirements. The Act defined a “community financial institution” (CFI) to be a FDIC-insured institution with average assets of \$500 million or less. The Act also allows the Finance Board annually to adjust this CFI size limit by the percent change in the Consumer Price Index. Accordingly, the size limit increased to \$517 million in 2001 and \$527 million in 2002.

From December 31, 1999, to December 31, 2001, the number of CFI members increased by 282, but the percentage of all members that are CFIs decreased to 81.9 percent from 83.9 percent. Over this period, 161 members migrated from the CFI to the non-CFI designation because their assets increased.

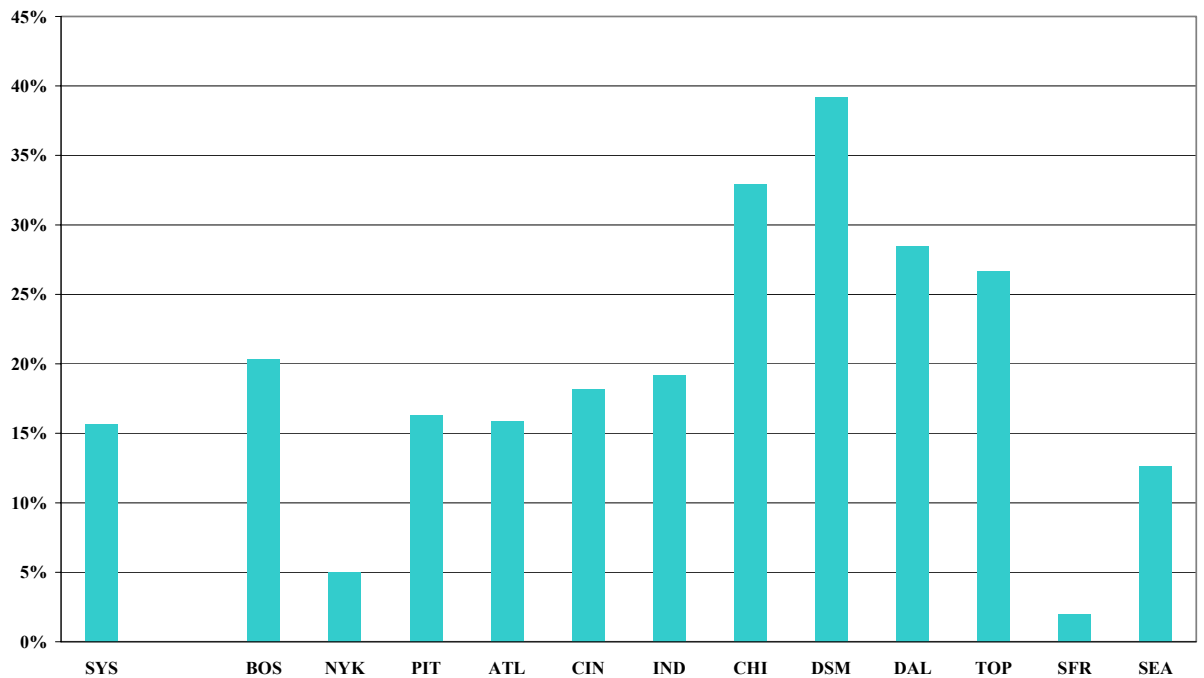
CFI members hold less than 12 percent of total advances, and this percentage is largely the same as at the end of 1999. CFI members hold 15.7 percent of System capital.



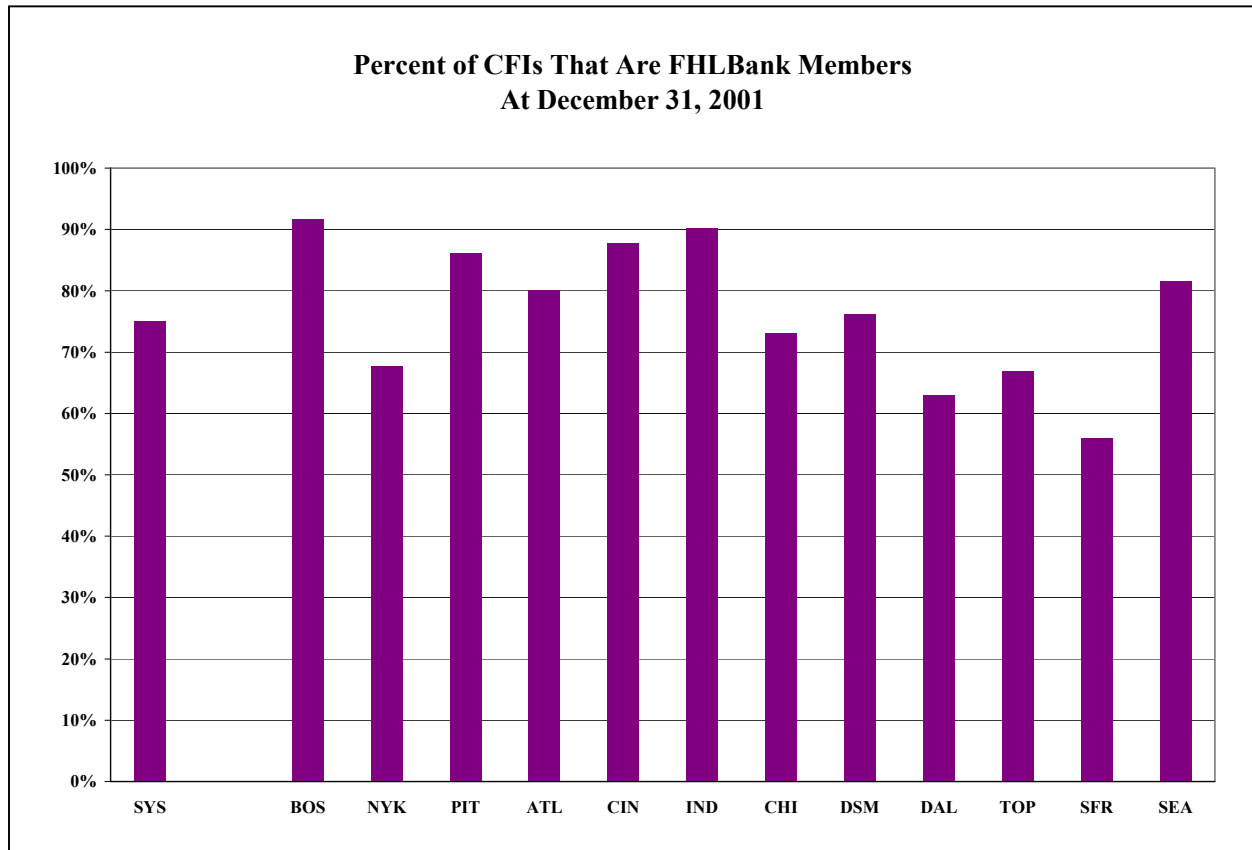
Advances to CFIs as a Percent of Total Advances



**CFI Capital as a Percent of Total Capital
At December 31, 2001**



At December 31, 2001, approximately 75 percent of all banks and thrifts with assets of \$517 million or less were members of an FHLBank. Approximately 2,150 additional small banks and thrifts could potentially qualify as an FHLBank member. Over 90 percent of all CFIs in the Boston and Indianapolis districts are members, and only 56 percent of CFIs in the San Francisco district are members.



Section IV

Collateral

On November 12, 1999, the Gramm-Leach-Bliley (GLB) Act was signed into law, which, among other things, amended portions of the Federal Home Loan Bank (FHLBank) Act. The amendments provide smaller lenders with greater access to FHLBank System membership and advances and expanded the types of collateral acceptable from all members to secure advances. The GLB Act established a category of members called "community financial institutions" (CFIs) consisting of FDIC-insured institutions with assets of \$500 million or less. In addition, the GLB Act authorized the FHLBanks to make long-term advances to CFI members for the purposes of providing funds for small businesses, small farms, and small agri-businesses.

The Federal Housing Finance Board (Finance Board) adopted a final rule on June 29, 2000, that amended its regulations to allow the FHLBanks to accept from CFI members new categories of collateral to secure advances including secured loans for small business, small farms, or small agri-businesses, or securities representing a whole interest in such secured loans. The rule also implemented the GLB Act provision that removed the limit for all members on the amount of advances that may be secured by other real estate-related collateral. The amount of other real estate-related collateral had been limited to 30 percent of the member's capital.

Under the amended advances regulations adopted by the Finance Board on June 29, 2000, each of the FHLBanks must file a notice with the Finance Board for any expansion of their business activities and acceptance of new types of eligible collateral. Among other requirements of the new business activities rule, the FHLBanks must file a notice to maintain or expand their use of other real estate-related collateral and document their plans to allow CFI members to pledge small business, small farm, and small agri-business loans to support advances.

Eligible collateral

The FHLBank Act specifically identifies types of collateral that the FHLBanks may accept from any member. Eligible collateral categories are:

- whole first mortgages on improved residential property and securities representing a whole interest in such mortgages;
- securities issued, insured, or guaranteed by the U.S. government or by a U.S. government agency;
- deposits in an FHLBank;
- "other real estate-related collateral" (ORERC) with a readily ascertainable market value; and
- secured loans for small business, small farms, or small agri-businesses, or securities representing a whole interest in such secured loans, in the case of any CFI.

Collateral Practices

The FHLBanks operate varying collateral securing procedures as determined by their boards of directors. All FHLBanks use a blanket lien to secure advances, however, the FHLBanks differ on what is acceptable to secure advances under the standard blanket lien.

Although the majority of members remain under the blanket lien, many commercial bank members have been reluctant to provide their FHLBank with a blanket interest in all their assets, or all of their single-family mortgages. Several of the FHLBanks have developed modified blanket liens that cover only certain collateral assets or are used with a specific listing document that has the ability to lower collateral haircuts and raise borrowing power. The Chicago FHLBank has developed a modified blanket lien that covers only one- to four-family mortgage assets. In addition, some members pledge only delivered securities to avoid the cost of the collateral verification process and to obtain a lower haircut on pledged collateral.

All FHLBanks currently accept multifamily mortgage collateral. However, the FHLBanks generally report that many members have sufficient single-family collateral to support their borrowings and are not particularly interested in pledging multifamily mortgages, although several FHLBanks report members who specifically want to pledge multifamily collateral. Exceptions are the New York and San Francisco FHLBanks whose members are more actively involved in multifamily lending, and, therefore, these two FHLBanks have more advances supported by multifamily mortgage loans.

All FHLBanks accept securities as collateral, although the types of securities that may be pledged for advance collateral may vary from FHLBank to FHLBank. For example, some FHLBanks will not accept certain types of derivative mortgage-backed securities or a security rated lower than single-A except on a limited case-by-case basis.

ORERC accepted by some of the FHLBanks includes commercial mortgages, second mortgages, lines of credit, and participation loans. Only the Chicago FHLBank does not yet provide a specific listing of acceptable ORERC, as decisions are made on a case-by-case basis. Many FHLBanks will only accept ORERC collateral only after all other types of collateral available from a member has been exhausted. (See Attachment 2 for a discussion of each FHLBank's acceptable other real estate-related collateral.)

Finance Board regulation 950.9 requires the FHLBanks to develop written procedures to verify regularly the existence of eligible collateral to secure advances. Some FHLBanks implement this provision by requiring their members to obtain a compliance statement from an external auditor verifying the existence of eligible collateral adequate to secure any advances or credit lines. Most FHLBanks exclude securities from the blanket lien because possession of the securities is necessary to perfect an interest in such collateral.

During the past several years, many of the FHLBanks have added collateral valuation specialists to their staffs such as multifamily and commercial mortgage appraisers. All the FHLBanks perform on-site member collateral verification audits. The FHLBank's on-site collateral verification audit triggers vary. While the Pittsburgh FHLBank endeavors to perform

annual on-site verification collateral visits of all members, membership collateral audit coverage varies among the FHLBanks.

FHLBank Policies

FHLBank policies concerning the types and handling of collateral vary somewhat.

- Five FHLBanks -- Pittsburgh, Indianapolis, Des Moines, Topeka, and Seattle -- lend against all eligible collateral under a standard blanket lien.
- Eight FHLBanks -- Pittsburgh, Cincinnati, Indianapolis, Des Moines, Dallas, Topeka, San Francisco, and Seattle -- lend against multifamily mortgages under the blanket lien using standard book values.
- Four FHLBanks -- Boston, New York, Atlanta, and Chicago -- require a specific listing or delivery of multifamily loans to ascertain collateral value.
- Two FHLBanks -- New York and Chicago -- lend only against one- to four-family mortgages under their blanket lien.
- At 10 FHLBanks -- Boston, New York, Atlanta, Cincinnati, Chicago, Des Moines, Dallas, Topeka, San Francisco and Seattle -- all securities collateral requires delivery to the FHLBank or a FHLBank approved custodian to receive collateral value.
- Two FHLBanks -- Chicago and San Francisco have developed a modified or "mini" blanket lien, which covers only certain pledged assets and better suits commercial bank members in their districts.

Collateral Margins

The FHLBanks discount the collateral securing advances; that is, the market value of the collateral must exceed the market value of the advance. Factors used to determine the discount or “haircut” on collateral includes market risk (the risk that the value of the collateral will be lower at liquidation than when last valued), ease of collateral liquidation, costs of liquidation, and the financial strength of the member.

Because of the blanket lien that applies to most borrowing members, the amount of collateral pledged greatly exceeds the amount of outstanding advances. Margins applied to collateral vary, but the general trend is that securities receive the smallest haircut, followed by one- to four-family mortgages, multifamily mortgages, and other real estate-related collateral. (See Attachments 2, 3, and 4). Highly rated securities (triple-A and double-A rated) receive a smaller haircut because they are considered the most liquid and have the most readily ascertainable market value.

Multifamily mortgage loans receive a larger haircut than single-family mortgages due to a variety of features inherent in multifamily properties. Multifamily property loan amounts are

larger, property turnover is slower, loan liquidity thinner, and multifamily property loan value is based largely on expected cash flows that are affected by a variety of factors (*e.g.*, vacancy rates, quality of management, capital reserves, and geographic location). Single-family properties are much easier to value because payments flow from a single borrower whose credit quality is easier to access, and loan turnover and liquidity are greater.

Collateral specifically listed by a member or delivered to an FHLBank generally receives a smaller haircut than collateral pledged under the blanket liens because the FHLBank knows which asset is supporting an advance and has usually determined the market value of the pledged asset or the FHLBank has a perfected security interest in the collateral. In addition, the FHLBank controls the collateral in the event of member default. One exception is the Pittsburgh FHLBank, which applies a larger haircut because members whose collateral is pledged under a specific pledge agreement represent more risk because of a lack of a blanket lien on all unencumbered assets.

**FHLBANK COLLATERAL POLICIES AND PRACTICES
As of December 31, 2001**

Bank	# of: Borrowers Members (% of Borr. to Members)	% of Borrowers under B: Blanket L: Listing D: Delivery	Policies and Practices
BOS	344 462 (74%)	B: 96% L: 2% D: 2%	The Bank's blanket lien covers all assets, but it only lends against owner-occupied, one- to four-family mortgages, securities for members in blanket status that safe keep their own securities, and certain real estate-related other loans, regardless of delinquency status, to the extent that the mortgages or loans are insured or guaranteed by the United States or any of its agencies. The Bank requires securities to be delivered to the Bank or to a Bank-approved custodian. Members in blanket status that safe keep their own securities must deliver securities to the Bank if total borrowings exceed 25 percent of assets and/or if securities are a substantial percentage of collateral pledged to the Bank. The Bank requires a listing of non-owner-occupied one- to four- family mortgages, multifamily mortgages, and other real estate-related collateral, and for all eligible CFIs, small-farm, small-business and/or small agri-business loans. The Bank has a multifamily property appraiser and a commercial loan analyst on staff to examine and value loans.
NYK	207 295 (70%)	B: 43% L: 45% D: 12%	Blanket lien covers all assets, but the Bank only lends against one- to four-family mortgages under its blanket. A UCC financing statement filed against all of the member's and pledging subsidiary/affiliate's assets, with the exception of securities, perfects the Bank's blanket lien. The Bank's policy requires listing of one- to four-family loans held and pledged by subsidiaries/affiliates, loans held for sale, loans serviced by an outside servicer or held by a custodian, co-ops, multifamily loans, and commercial real estate mortgages. Members listing multifamily and commercial real estate mortgage must meet customer collateral risk assessment criteria or must deliver those collateral types. All securities collateral requires delivery. Delivery of all assets is required for credit union, housing finance agency,

**FHLBANK COLLATERAL POLICIES AND PRACTICES
As of December 31, 2001**

			insurance company members, and those members who do not meet certain credit and financial criteria. The listing requirement is satisfied via an electronic data format based on secondary market standards for mortgage sales and securitizations. The Bank performs an extensive on-site evaluation and review of the member's ability to underwrite, service, and administer income producing real estate portfolios.
PIT	279 368 (76%)	B: 70% L: 0% D: 30%	The Bank accepts and lends against all unencumbered eligible collateral under the blanket lien, including securities, multifamily loans, and other real estate-related collateral. Members provide a quarterly certification, which the Bank audits periodically, stating market values and applying the Bank's designated haircuts to collateral. Pittsburgh does not use a listing of collateral facility, only blanket or delivery.
ATL	716 1177 (61%)	B: 73% L: 24% D: 3%	Blanket lien covers one-to four-family mortgages, commercial mortgages, and multifamily mortgages. Of the members in listing status, at least half choose listing status because of lower haircuts on pledged collateral or a desire to avoid the blanket lien. The Bank provides appraisal training to the staff that reviews multifamily loans. The Bank recently hired an experienced commercial loan underwriter.
CIN	543 762 (71%)	B: 98.90% L: 0.36% D: 0.74%	Blanket lien can cover one-to four-family mortgages, multifamily mortgages, home equity lines of credit, second mortgages, and agricultural or commercial mortgages. Separate agreements are used to make a pledge of any given category of collateral other than first-lien residential mortgages or securities. A member may only pledge multifamily loans or other real estate collateral (referred to internally as "Supplemental Collateral") if it has also already pledged its single-family loans, and may only avail itself advances against multifamily loans or Supplemental Collateral only after it has exhausted all non-Supplemental Collateral. Eligibility to pledge Supplemental Collateral is subject to other credit rating and loan performance criteria. The "Collateral Status" of a member (blanket vs. listing or delivery) is determined by a matrix of credit rating vs.

**FHLBANK COLLATERAL POLICIES AND PRACTICES
As of December 31, 2001**

			various financial condition/performance factors. Essentially, as credit risk to the Bank increases, the collateral status of a given member is stepped up first to listing and delivery status. De Novo members are required to be in physical delivery. Beginning in 2002, higher-risk and higher-exposure members will be subject to Bank-performed member collateral verifications, otherwise the Bank relies on auditor positive assurance letters. Separate conditions apply to Supplemental Collateral valuations.
IND	305 421 (72%)	B: 63% L: 28% D: 9%	Blanket lien covers all assets, and the collateral policy lists six categories: one- to four-family whole mortgage loans, multifamily whole mortgage loans, government and agency securities, private-label mortgage-backed securities, FHLBank deposits, and other real estate-related collateral. Members can be under listing status for several reasons: (1) financial condition, (2) inability to cover total borrowings under the blanket lien, or (3) preference for listing specific collateral for higher collateral value (particularly commercial banks).
CHI	578 844 (68%)	B: 75% L: 20% D: 5%	The Bank's "standard" blanket lien covers all assets, although the Bank lends only against one- to four-family mortgages under its blanket lien. The Bank also uses a "mini" blanket lien, covering only one- to four-family mortgages to accommodate commercial banks. Members with less than \$30 million or 10 percent of their assets in one- to four-family mortgages must submit a short listing because of concerns that small levels of mortgages are not monitored. Members eligible for listing can get a 70 percent to 80 percent margin. The Bank began accepting multifamily and mixed use-farm land as collateral in 2000. Both types of collateral are acceptable only from members that have pledged all of their one- to four-family loans and their eligible securities collateral, less a prudent liquidity reserve.
DSM	903 1229 (73.5%)	B: 95% L: 4% D: 1%	Blanket lien covers all assets. The Bank lends under its blanket lien against one- to four-family mortgages, multifamily mortgages, agricultural real estate, commercial real estate, second mortgages; and agri-business and other business loans for approved CFIs. Securities require

FHLBANK COLLATERAL POLICIES AND PRACTICES
As of December 31, 2001

			delivery. The Bank requires listing and/or delivery for housing associates and insurance companies. The Bank employs six collateral auditors and prioritizes collateral reviews based on credit concentration, financial performance, and the amount of pledging of the highest-risk-profile collateral.
DAL	504 822 (61%)	B: 92.3% L: 0 D: 7.1%	For eligible members, blanket lien covers one- to four-family and multifamily mortgages and other real estate collateral up to 30 percent of member capital. Bank policy limits borrowing under blanket to 35 percent of member assets. For all eligible CFIs, blanket lien also includes small farm, small business, and small agri-business loans. Only members eligible to borrow under blanket may secure advances with other real estate collateral in excess of 30 percent of capital. Qualifying SBA and USDA guaranteed loans must be listed. Dallas underwrites commercial loans and has experienced multifamily property appraisers on staff.
TOP	565 829 (68%)	B: 97% L/D: 3%	The blanket lien covers all encumbered eligible collateral. The Bank requires securities to be delivered to the bank or to a Bank-approved custodian. Members complete quarterly certifications on loan collateral. The Bank requires collateral verifications at a minimum of once every two years.
SFR	196 323 (61%)	B: 9% L: 87% D: 4%	The blanket lien covers one- to four-family and multifamily mortgages. The Bank was the last FHLB to use the blanket lien and began offering this collateral option to members in 1995. Members have been reluctant to switch to the blanket, in part because smaller haircuts are applied to listed collateral, e.g., the Bank lends up to 90 percent of one- to four-family mortgages that are listed compared with 70 percent under the blanket lien. To ensure the diversity of collateral, the Bank limits multifamily mortgages under the blanket lien to 25 percent of the member's total borrowing capacity. Under listing status, multifamily mortgages may qualify for a borrowing capacity of up to 80 percent. The Bank has experienced multifamily appraisers on staff. The Bank requires the delivery of all securities pledged for collateral.

FHLBANK COLLATERAL POLICIES AND PRACTICES
As of December 31, 2001

SEA	220 376 (59%)	B: 85% L: 0.9% D: 14.1%	The Bank accepts and lends against all eligible residential loan collateral under the blanket lien, including multifamily mortgages. No credit is given for undelivered securities under the blanket lien. Bank requires an annual collateral verification in either two situations: (1) If the borrower had, at any time during the previous fiscal year, total indebtedness to the Bank in excess of \$2 million; or (2) If the borrower had, at any time during the previous fiscal year, total indebtedness to the Bank in excess of 50 percent of their estimated eligible collateral.
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Other Real Estate-Related Collateral

Boston: Other real estate-related collateral (ORERC) includes whole first mortgage loans on improved commercial real estate property; second mortgages on improved residential, multifamily, and commercial properties; closed-end home equity loans; and mortgage-backed securities with other real estate-related underlying assets. ORERC acceptability is determined on a case-by-case basis and the Bank may, in its sole discretion, refuse certain types of high-risk commercial real estate loans to be pledged as collateral. High-risk property types are those that are management intense, single purpose, or have limited improvements. All ORERC must have a readily ascertainable market value, and the Bank must be able to perfect its security interest. The value placed on ORERC collateral will be the lesser of 50 percent of the book or market value of the loan. Such loans are subject to individual review and acceptance by the Bank and, at a minimum, will be maintained in listing status by the Bank. Under the Bank's "Products Policy" effective December 31, 2000, the 30 percent GAAP capital limitation on category ORERC has been removed. The Bank retained the requirement that members must exhaust all other categories of collateral before pledging ORERC.

New York: ORERC includes fully disbursed whole first mortgage loans on improved residential properties that are 60 through 90 days delinquent; fully-disbursed current (not greater than 59 days delinquent) whole first mortgage loans on improved commercial property and combination business/farm residential property; second mortgages on improved residential, multifamily, and commercial properties; home equity loans; participation mortgage loans; mortgage-backed securities with other real estate-related underlying assets; and other real estate-related assets not deemed by the Bank to qualify under other categories. Members may pledge ORERC up to an amount equal to their listed or delivered preferred collateral, first lien one- to four-family mortgages and MBS backed by the same. Exceptions to this restriction may be extended to those institutions that do little one- to four-family residential lending due to the urban markets they serve. At this time, the Bank is not accepting CFI collateral.

Pittsburgh: ORERC consists of construction and land development loans, commercial real estate loans, farm land, and home equity loans, and other junior-lien mortgages that have a readily ascertainable value. The aggregate amount of a member's loans secured by such collateral shall not exceed 30 percent of such member's total maximum borrowing capacity, except where a professional third party review has been performed on additional ORERC to be pledged. Determination to accept ORERC is on a case-by-case basis. Members must exhaust all other categories of collateral before consideration of ORERC.

Atlanta: ORERC consists of commercial mortgages, multifamily mortgages, home equity lines of credit, and second mortgages, subject to the Bank's acceptance.

Cincinnati: ORERC consists of the following (termed "Supplemental Collateral"): commercial real estate; home equity lines of credit; agricultural real estate; privately issued mortgage-backed securities; and residential second mortgages. ORERC is accepted under three separate programs: a high-haircut certification option, a low-haircut certification option, and a listing option. The high-haircut option is a simple program only requiring a blanket pledge of

any or all of the above specific collateral types, and a submission of a periodic collateral certification by the member. As a trade-off for simplicity, haircuts under this option are aggressive, ranging from 250 to 400 percent. The low-haircut option provides much more favorable haircuts, as low as 150 percent; however, in addition to submission of the certification documentation, the Bank performs thorough periodic on-site reviews, which include extensive loan sampling and an analysis of underwriting standards and credit administration practices. Collateral certification documents under both these options exclude loans with various higher risk characteristics. Under the listing option, individual loans are subject to market valuation as well as the above mentioned on-site review program, and must meet project type specific underwriting criteria. Members have availability against individually listed loans, while still providing a blanket pledge. Initially, borrowing capacity against any one type of ORERC is limited to 25 percent of total borrowing capacity, and the aggregate of all ORERC cannot exceed 50 percent of total borrowing capacity. However, subsequent to a satisfactory on-site Bank review, one or both of these caps may be removed. There are also initial eligibility requirements for pledging ORERC, including a satisfactory internal credit rating and good loss and delinquency performance within the ORERC pledged portfolio.

Indianapolis: ORERC consists of second-lien closed-end residential mortgage loans, home equity lines of credit, commercial real estate loans, and securities backed by second mortgages or commercial real estate loans. A member must first exhaust its supply of listed eligible collateral prior to the acceptance of ORERC. For ORERC to be acceptable to the Bank, it must determine that such collateral has a readily ascertainable market value, that it can be reliably discounted to account for liquidation, and that it can be liquidated in due course. The Bank must be able to perfect its security interest. The over-collateralization margin for listed ORERC is 155 percent for second lien closed-end residential mortgage loans, 175 percent for home equity lines of credit, 180 percent for commercial real estate loans, and 110 to 115 percent for securities backed by second mortgages or commercial real estate loans. Over-collateralization values are based on the market value of loans as determined by the Bank. The over-collateralization margin will be reduced to 125 percent for monthly valuation from an independent third party firm chosen by the Bank and paid for by the member. The aggregate amount of outstanding advances secured by ORERC cannot exceed 150 percent of a member's core capital.

Chicago: ORERC only acceptable as qualifying collateral when other sources have been exhausted. ORERC collateral acceptance is determined on a case-by-case basis, based on a readily ascertainable value in which the Bank can perfect a security interest under the U.C.C., as adopted in Illinois. The aggregate amount of outstanding advances secured by ORERC cannot exceed 30 percent of a member's capital.

Des Moines: ORERC consists of commercial real estate loans (first liens), agricultural real estate loans (first liens), and second mortgages on one- to four-family properties. The Bank has a pending proposal to accept home equity lines of credit. The amount of ORERC and CFI collateral is limited to 200 percent of borrower's capital. The Bank reserves the right to require priority of pledging.

Dallas: ORERC consists of non-securitized real estate-related collateral, which includes commercial real estate mortgages, home equity loans, junior liens, participations, and mortgage

warehouse loans. CFI members eligible to borrow under blanket may pledge small business, small farms and/or small agri-business loans, or securities representing a whole interest in such secured loans. Only members eligible to borrow under the blanket lien may secure advances with ORERC in excess of 30 percent of capital. In addition, ORERC in excess of 30 percent of capital must be delivered to the Bank. Advances secured by ORERC must not exceed 200 percent of capital (only for small business, small farm and small agri-business loans).

Topeka: ORERC consists of private-issue mortgage-backed securities supported by ORERC assets, agricultural real estate commercial real estate, second mortgages on residential property, construction mortgages, and participations. Members must exhaust their supply of one- to four-family residential real property and multi-family residential real property before pledging ORERC. Members must submit specific supplemental schedules for ORERC. The aggregate amount of ORERC is limited to 15 percent of the member's assets.

San Francisco: ORERC accepted on a listing only and includes commercial loans, single-family second mortgages (including home equity lines), and participation loans. The Bank lends a maximum of 55 percent of the value of the ORERC. The Bank added certain types of small business, farm and agri-business loans to the list of eligible collateral for approved CFI's.

Seattle: ORERC consists of: non-agency mortgage-backed securities (not otherwise eligible), second mortgage loans, commercial real estate loans, mortgage loan participations purchased, and other items on a case-by-case basis. ORERC must have readily ascertainable value where the Bank can perfect its security interest. ORERC is limited to no more than 50 percent of total Type I—II collateral for non-CFI customers. CFI members eligible to borrow under blanket lien may also pledge small business, small farms and/or small agri-business loans, or securities representing a whole interest in such secured loans. Total of CFI collateral and ORERC may be no more than 200 percent of a CFI member's Type I-II collateral for CFI institutions.

ONE- TO FOUR-FAMILY RESIDENTIAL MORTGAGES

Valuation of One- to Four-Family Residential Mortgages			
	Blanket Lien	Listing Status	Delivery Status
BOS	75% of BV	The lesser of: 80% of MV or 75% of BV (owner occupied.) ¹	
NYK	95% MV for govt. loans (FHA, VA) 70-90% of MV for conventional ²		
PIT	80% of BV ³	75% of MV	80% of MV
ATL	75% of BV	85% of MV	
CIN	57-80% of BV	80% of MV	
IND	69% of BV	80% of MV	
CHI	60% of BV	60% of BV or 70-80% of MV	Determined at Delivery
DSM	67-80% of BV ⁴	57-91% of MV	
DAL	75% of BV ⁵	90% of MV	
TOP	80-85% of BV	80-85% of MV ⁶	
SFR	65-80% of BV	Up to 90% of MV	
SEA	83% of BV	85% of MV	

¹ For non-owner occupied one- to four-family mortgages, the Boston Bank values the collateral at the lesser of 50 percent of book or market value. The collateral valuation of owner-occupied one- to four-family residential loans fully insured by the FHA for members in blanket status is 85 percent of book value. For members in listing or delivery status, the valuation of these loans is the lesser of 90 percent of market value as determined by the Bank or 90 percent of book value.

² For members under the blanket lien, the Bank requires a verification of market value by an outside auditor or Bank staff on a periodic basis. Additional haircuts may be taken based on any additional risks noted within the subject portfolio.

³ Members provide a quarterly certification, which the Bank audits periodically, stating market values (if significantly different from BV) and applying the Bank's designated haircuts to collateral.

⁴ Haircut varies depending on numerous portfolio characteristics based upon review performed by collateral auditors. Until mortgage collateral verifications are performed using V-Score analysis, the V-score is set at 1.

⁵ Haircut varies depending on member's average internal risk score and mortgage collateral verification score V-Score.

⁶ The haircut can vary based upon the loan guarantee (VA) or loan insurance (FHA) and the delinquency status of the loan.

**COLLATERAL BORROWING CAPACITY
MULTIFAMILY MORTGAGES**

Valuation of Multifamily Mortgages			
	Blanket Lien	Listing Status	Delivery Status
BOS	N/A	Lesser of: 65% of BV or MV ¹	
NYK	N/A	65% - 75% of MV	
PIT	50% of BV	45% of MV	50% of MV
ATL	N/A	75% of MV	
CIN	40% to 80% of BV	80% of MV	
IND	69% of BV	80% of MV	
CHI	N/A	Lesser of 50% of unpaid principal or 50% of appraised value	
DSM	50% to 67% of BV	44% to 71% of MV	
DAL	75% of BV	Lesser of 80% of BV or 90% of MV or appraisal	
TOP	65% of BV	65% of MV	
SFR	50% to 70% of BV ²	65% to 80% of MV	
SEA	80% of BV	80% of MV	

¹ FHA-insured multifamily mortgages delivered to the Bank are valued at the lesser of 90% of BV or MV. Multifamily loans with low-income housing tax credits are valued at the lesser of 95% of BV or MV. To receive the higher collateral valuation, multifamily loans must meet criteria established by the Bank.

² Under blanket lien, multi-family collateral is limited to 25% of total borrowing capacity. Bank may increase borrowing capacity based on collateral track record and internal financial rating. Members may not only pledge multi-family loans under the blanket lien. Additional borrowing capacity is given to adjustable-rate loans.

COLLATERAL BORROWING CAPACITY OF SECURITIES

Valuation of Securities --Percent of Market Value (Listing or delivery status unless otherwise noted)

	Treasuries	Agencies	Agency MBS ¹	AAA-Rated MBS	AA-rated MBS	A-rated or lower MBS	Other Securities
BOS ²	95%	95%	95%	90% (no differentiation according to ratings)			Case-by-case basis
NYK	95%	87-95% ³	91%	85-87%	85-87%	75-80%	Private placement pass-throughs are valued at 60% to 68%.
PIT ⁴	97%	97%	95%	92%	92%	N/A	As ORERC
ATL	97%	97%	97%	90%	90%	N/A	Mutual funds 90%
CIN	95-99%	91-99%	74-95%	80-91%	77-80%	N/A	SBA certificates 80%
IND ⁵	95%	95%	95%	91% (no differentiation according to ratings)			Mortgages and loans insured or guaranteed by SBA now eligible. Some mutual fund shares.
CHI	95%	95%	90-95% ⁶	85-90% (AA or AAA only) ⁷			As ORERC
DSM	97%	95%	95%	95%	91%	87% ⁸	Rated CMBS 82% to 89%.
DAL	99%	99%	90-98%	Case-by-case basis			Case-by-case basis
TOP ⁹	95%-99%	82%-97%	97%	85%	83%	N/A	Some mutual funds, case-by-case basis
SFR	99.5% to 98%	98% ¹⁰	45% to 97% ¹¹	94% to 95% ¹²	90% to 94% ¹³	50% to 80% ¹⁴	Mutual funds comprised of eligible securities at 75% and some mortgage

COLLATERAL BORROWING CAPACITY OF SECURITIES

							related municipal bonds at 90%.
SEA ¹⁵	97%	97% ¹⁶	95%	87% (no differentiation according to ratings)			Case-by- case basis

¹ MBS includes pass-throughs, collateralized mortgage obligations (CMOs), and real estate mortgage investment conduits (REMICs). AAA-, AA-, and A-rated MBS refers to privately issued securities.

² All securities pledged as collateral by members must be maintained in delivery status at the Bank.

³ FHLBank bonds and discount notes are valued at 95 percent.

⁴ The Bank also accepts securities under the blanket lien with the following valuations: Treasury and agency securities, 95 percent; agency MBS, 90 percent; and AAA or AA MBS, 87 percent.

⁵ Values in the table are for securities delivered to Bank. The percent of market value is 87 percent for securities held at a third-party custodian.

⁶ Agency MBS (pass-through) are valued at 85 percent; agency CMOs are valued at 75 to 85 percent.

⁷ The Bank limits securities subject to above-average credit or price volatility risk to 30 percent of the total collateral pledged by the member.

⁸ The haircut varies based upon maturities and repricing frequencies. Structured notes are valued at 84 percent.

⁹ The haircut varies based upon maturities and repricing frequencies. Structured notes are valued at 82 percent.

¹⁰ FHLBank, Fannie Mae, and Freddie Mac bonds and discount notes are valued at 98 percent. SBA Pools are valued at 95 percent; FHLB Structured Notes are valued at 80 percent.

¹¹ Agency MBS pass-throughs are valued at 97 percent; agency CMOs are valued at 96 percent; agency CMO accrual bonds are valued at 45 percent.

¹² AAA-rated publicly registered pass-throughs and CMOs are valued at 95 percent and AAA-rated private placement pass-throughs and CMOs are valued at 94 percent.

¹³ AA-rated publicly registered pass through and CMOs are valued at 94 percent and AA private placement pass-through and CMOs are valued at 90 percent

COLLATERAL BORROWING CAPACITY OF SECURITIES

¹⁴ A-rated publicly registered pass-throughs are valued at 80 percent; A-rated private placement pass-throughs and publicly registered CMOs are valued at 75 percent; A-rated private placement CMOs are valued at 70 percent.

¹⁵ As of November 30, 2000, the Seattle Bank no longer accepts securities under the blanket lien. All securities collateral must be delivered to the Seattle Bank or specifically pledged via a tri-party agreement signed by the Seattle Bank, the customer, and an approved third-party custodian.

¹⁶ Structured notes are valued at 80 percent; the guaranteed portion of SBA loans, Bureau of Indian Affairs loans, and other securities guaranteed by an agency of the U.S. government are valued at 83 percent of the discounted portion of such loans.